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ABSTRACT

As part of an annual statewide evaluation process, quantitative information on community college education is reviewed by the Maryland State Board for Community Colleges. Subsequently, in particular cases, a qualitative assessment is conducted by individual colleges in response to specific questions raised by the Board. This report provides the results of individual qualitative evaluations of 53 programs throughout the state and the results of a statewide evaluation of data processing/computer programming career programs. First, the data processing/computer programming evaluation is presented. This section includes program descriptions, information on student trends and characteristics, program performance, results of evaluations conducted by the colleges, and recommendations. The next section contains qualitative program evaluation reports for 53 programs identified as having specific problems (e.g., low transfer performance, low enrollments, low job placement rates, high costs, inadequate follow-up, or declining awards). Each evaluation report includes identifying information on the college, the program, and the level of award; an overview of the problem identified; questions posed by the Board to identify the causes of the problem; the factors contributing to the problem; the college's view of when the situation might stabilize; the steps which the college plans to take to address the problem; specific issues raised by the Board; and Board recommendations. (EJV)

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Maryland State Board for Community Colleges

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Maryland Community Colleges 1985 Program Evaluations

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FOREWORD

In 1978, the State Board for Community Colleges approved the Maryland Community College Program Evaluation System. This system, conceptualized in 1974, is based on a quantitative review of community college program information by the State Board for Community Colleges and a subsequent qualitative assessment conducted by the individual community colleges in response to specific questions raised by the State Board. The system was developed through a cooperative effort of the Maryland community college presidents, deans, researchers, faculty, and the State Board staff. The fundamental premise of the system is that Maryland's community colleges are striving to achieve program quality and that the colleges have the capacity for self-assessment and the courage to take action based upon the results of such assessments.

During the first eight complete cycles of the evaluation system, 381 programs were evaluated. Many programs were improved, 75 were discontinued, and 13 are currently inactive.

In July 1985, each college received a set of questions from the State Board for Community Colleges based upon data in the Program Data Monitoring System. This document contains the results of individual community college qualitative evaluations of 53 programs throughout the community college system. Also included are the results of a statewide evaluation of Data Processing/Computer Programming occupational programs. In most cases the efforts of the colleges went beyond the questions raised by the State Board. Full credit should go to Maryland community colleges for their efforts. The community college Program Evalution System is an annual process. Additional community college programs will be identified for evaluation in 1986.

James D. Tschechtelin
Executive Director

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PROGRAMS DESIGNATED FOR QUALITATIVE EVALUATION - 1985:

College / Program	Issue	HEGIS Code	Page
Allegany			
Business Administration Transfer	Low transfer performance	4970-01	15
Data Processing Technology	Declining enrollment Statewide evaluation	5101-01	18
Forest Technology	Declining enrollment Low placement High cost Previous evaluations in 1978 & 1981	5403-01	21
Anne Arundel			
Office Technology		5005-01	25
Communication Arts Technology	Low placement High cost Previous evaluations in 1979 & 1982	5008-01	29
Data Processing	Declining enrollment Statewide evaluation	5101-01	34
Baltimore			
General Studies Transfer	Declining enrollment Low transfer performance Previous evaluation in 1979	4950-01	37
Fashion Design	Declining enrollment Low awards Low placement	5012-02	41
Business Data Processing	Declining enrollment Low awards Previous evaluation in 1981	5103-01	44

College Program	Issue	HEGIS Code	Page
Baltimore contd.			
Dental Assisting	Declining enrollment Low awards Inadequate follow-up High cost Previous evaluation in 1979	5202-01	48
Electronics Technology	Declining enrollment Low placement	5310-01	51
Public Sector Administration	Low enrollment Low awards	5508-01	54
Catonsville			
Computer Studies/Data Processing	Declining enrollment Statewide evaluation	5101-01	55
Mental Health Services	Declining enrollment Inadequate follow-up High cost Previous evaluations in 1978 & 1981	5216-01	59
Civil Engineering Technology	Low awards	5309-01	62
Recreation, Parks, and Leisure Studies	Declining enrollment Inadequate follow-up Previous evaluation in 1981	5506-01	64
Cecil			
Arts and Sciences Transfer	Low awards Inadequate follow-up Previous evaluation in 1981	4910-01	67
Data Processing	Declining enrollment Statewide evaluation	5101-01	71
Charles			
Office Technology	Declining enrollment Declining awards Low placement	5005-01	74
Data Processing	Declining enrollment High cost Statewide evaluation	5103-01	82
Licensed Practical Nursing	Declining enrollment Declining awards Inadequate follow-up Previous evaluation in 1982	5209-01	87

College Program	Issue	HEGIS Code	Page
Chesapeake			
Business Administration Transfer	Declining enrollment Inadequate follow-up	4970-01	90
Computer/Data Processing	Declining enrollment Statewide evaluation	5103-01	93
Dundalk			
Computer Programming Technology	Declining enrollment Statewide evaluation	5103-01	97
Retail Floristry	Declining enrollment	5402-02	100
Labor Studies	Declining enrollment Inadequate follow-up High cost Previous evaluation in 1981	5599-04	102
Essex			
Data Processing	Declining enrollment Statewide evaluation	5103-01	105
Computer Technology	Declining enrollment Inadequate follow-up	5105-01	110
Medical Laboratory Technician	Declining enrollment	5205-01	114
Mental Health/Human Services	Declining enrollment Declining awards Low placement High cost Previous evaluations in 1978 & 1982	5216-01	116
Frederick			
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Dental Assisting	Declining enrollment Inadequate follow-up High cost Previous evaluation in 1982	5202-01	123
Park Management	Inadequate follow-up Previous evaluation in 1981	5506-02	124

College Program	Issue	HEGIS Code	Page
Garrett			
Arts and Sciences Transfer	Declining enrollment Declining awards	4910-01	126
Coal Mining Technology	Low enrollment Low awards Inadequate follow-up Previous evaluation in 1982	5399-03	128
Hagerstown			
Data Processing	Declining enrollment Low placement Statewide evaluation	5101-01	130
Hospitality	Declining enrollment Inadequate follow-up	5404-01	134
Harford			
Business Management	Declining enrollment Inadequate follow-up	5001-01	137
Data Processing	Declining enrollment Statewide evaluation	5101-01	142
Registered Nursing	Declining enrollment	5208-01	147
Howard			
Accounting	Declining enrollment Low placement	5002-01	151
Housing Management	Low enrollment Low awards Inadequate follow-up Previous evaluations in 1978 & 1981	5004-03	153
Residential Construction	Inadequate follow-up High cost	5317-03	154
Montgomery			
Business Administration Transfer	Low awards Low transfer performance	4970-01	156
Computer Science and Technology	Declining enrollment Low placement Statewide evaluation	5103-01	158
Computer Operator	Declining enrollment Low placement	5104-01	164
Mental Health Associate	Declining enrollment Low placement Previous evaluation in 1981	5216-01	168

College / Program	Issue	HEGIS Code	Page
Prince George's			
Secretarial Science	Declining enrollment	5005-01	173
Data Processing	Declining enrollment Statewide evaluation	5101-01	175
Radiologic Technology	Declining enrollment High cost	5207-01	177
Wor-Wic Tech			
General Studies Transfer	Low awards Inadequate follow-up Previous evaluation in 1980	4950-01	180
Computer Programming	Statewide evaluation	5103-01	184
Automotive Technology	Low enrollment High cost Previous evaluation in 1982	5306-01	189

Abstract

Data Processing/Computer Programming programs are offered at sixteen of the seventeen community colleges in Maryland. These programs prepare students for a variety of positions, such as manager of computer facilities, programmers, programmer analysts, and operators.

Enrollment by students majoring in Data Processing/Computer Programming increased dramatically from 1981 to 1983 but has decreased even more dramatically since then. Since the peak year of 1983, full-time student enrollment has declined over 50 percent with part-time student enrollment declining 31 percent, for a net total decline in Data Processing/Computer Programming majors of 36 percent, or nearly 4,817 students. Compared to other community college programs, Data Processing/Computer Programming programs enroll more men, more black students, more part-time students, and older students.

Data Processing/Computer Programming is an area that presents special and immediate challenges for the State's community colleges. Some colleges (small colleges in rural areas in particular) report problems in attracting and retaining qualified full-time faculty. The high equipment costs associated with this program area can also be a serious problem, especially in a steady-state or declining enrollment environment. Many colleges have turned to new and innovative cost containment approaches to get the most computer for their limited dollars. The colleges report the development of more powerful, faster, and less expensive microcomputers as the single most important trend in the rapidly changing data processing field. Most are developing new courses and curricula in direct response to that trend.

The State Board for Community Colleges makes the following recommendations:

1. For those colleges experiencing difficulty hiring full-time faculty for the Data Processing/Computer Programming program, consideration should be given to the following actions: (a) revision to academic salary structures consistent with supply and demand forces operating with the market place, (b) development of faculty recruitment procedures recognizing industry experience in lieu of academic credentials, and (c) use of current part-time faculty as a potential recruiting pool.

2. A top priority for colleges striving to offer a top notch Data Processing/Computer Programming program must be to provide a hardware and software environment that is state-of-the-art. Toward that end, colleges should consider a number of strategies to stretch the dollars available for equipment purchases, including the following: (a) educational discounts from manufacturers or through State purchasing agreements; (b) successful grantsmanship, especially Title III and federal vocational education monies; (c) donations from manufacturers in exchange for faculty work on software development; (d) long-term payback agreements; (e) student laboratory fees to offset equipment costs; (f) shared usage of

computer facilities so that costs are spread across many academic programs as well as administrative applications; (g) generating revenue by contracting with outside clients, including local schools, to provide data processing services; (h) shifting from high-cost rental agreements to less costly lease-purchase arrangements; and (i) maintaining efficient computer installations through the discontinuance of obsolete equipment and high maintenance costs.

3. Computers are at the leading edge of change in the American culture and hence more subject to market influences than traditional fields. Faculty, as well as administrators working in this area, must continually recommit themselves to staying responsive to the changing needs of college constituencies. In this regard, a program advisory committee is critically important. The State Board for Community Colleges sees the program advisory committee as important in all program areas, but especially so in rapidly changing high-tech programs like Data Processing/Computer Programming. Several colleges reported they do not currently have program advisory committees in place for their data processing and computer technology programs. These colleges are encouraged to officially activate and convene a data processing program advisory committee as soon as possible.

4. If they have not already done so, colleges should give strong consideration to expanding microcomputer offerings to include short-term continuing education training modules, regular semester length credit courses, and fully integrated credit certificate programs.

5. Given that the four-year degree is fast becoming a minimum requirement for many entry-level programming positions and given the fact that a large percentage of students enrolled in Data Processing/Computer Programming programs go on to transfer to a four-year institution, community colleges should develop strong articulation agreements with the University of Maryland, the State universities and colleges, and out-of-state institutions whenever possible.

STATEWIDE EVALUATION OF DATA PROCESSING/COMPUTER PROGRAMMING CAREER PROGRAMS

The program evaluation system of the Maryland State Board for Community Colleges is in its eighth complete cycle. The system is essentially a two-step process each year. First, all programs undergo a computer-based quantitative review built on data collected throughout the year. Programs are "flagged" on such indicators as low enrollment and high cost. Second, a smaller number of programs (usually about fifty) are identified for a more comprehensive qualitative evaluation to be conducted by college staff and later reviewed by the State Board staff. As part of this qualitative evaluation, one program is singled out for statewide evaluation.

For the 1985 program evaluation cycle, each college having a Data Processing/Computer Programming career program (HEGIS numbers 5101-01 and 5103-01) was asked to include the program in its qualitative evaluations. The resulting evaluations are included in the respective college sections of this publication. (Note: The evaluation of Howard Community College's program was published in 1984.) The Data Processing/Computer Programming area was selected for statewide evaluation because it is one of the most important programs to the State's community colleges by virtue of its size alone (nearly 10 percent of all credit students are enrolled in Data Processing/Computer Programming). Also, it is an area that presents special and immediate challenges: for example, especially high equipment costs and problems in attracting and retaining qualified full-time faculty.

Program Descriptions

Data Processing/Computer Programming programs are offered at sixteen of the seventeen community colleges in Maryland. Only Garrett Community College in Western Maryland does not offer the program.

Data Processing/Computer Programming programs are designed to prepare students for a wide variety of positions, such as managers of computer facilities, programmers, programmer analysts, and operators. The colleges offer many different curriculum options (as shown in Table 1) to meet these employment needs. Additionally, many colleges offer a Computer Service Technology program (hardware emphasis) as well as Computer Science and Information Systems Management transfer curricula.

Student Trends and Characteristics

As shown in Table 2, statewide headcount enrollment by students majoring in Data Processing/Computer Programming increased dramatically from 1981 to 1983 but has decreased even more dramatically since. For the five-year period shown in Table 2, enrollment by full-time students has decreased 35 percent while part-time enrollment has increased 7 percent, resulting in a net total decrease for Data Processing/Computer Programming majors of 5 percent. However, since the peak year of 1983, full-time student enrollment has declined over 50 percent with part-time student enrollment declining 31 percent, for a net total decline in Data Processing/Computer Programming majors of 36 percent, or nearly 4,817 students. This is certainly one of the more precipitous enrollment declines experienced in any program area for Maryland's community colleges.

Table 1

DATA PROCESSING/COMPUTER PROGRAMMING
PROGRAMS AND OPTIONS

Allegany - Computer Science and Technology
- o Computer Science and Technology, AA
- o Computer Programming, Certificate

Anne Arundel - Data Processing
- o Electronic Data Processing, AA
- o Computer Programming, Certificate
- o Microcomputer Applications/Operations, Certificate
- o Microcomputer Specialist, Certificate

Baltimore - Data Processing
- o Business Data Processing, Certificate/AA

Catonsville - Computer Studies/Data Processing Technology
- o Applications Programming, Certificate/AA
- o Small Systems, Certificate/AA
- o Data Processing Management, Certificate

Cecil - Data Processing
- o Data Processing, Certificate/AA

Charles - Computer Data Processing
- o Computer Data Processing, AA
- o Small Computer Management, Certificate

Chesapeake - Computer Studies
- o Business Data Processing, AA
- o COBOL Programmer, Certificate
- o Microcomputer Programmer/Operator, Certificate

Dundalk - Computer Programming Technology
- o Computer Programming, Certificate/AA
- o Microcomputer Programming, Certificate

Essex - Data Processing
- o Data Processing, Certificate/AA

Frederick - Data Processing
- o Data Processing, Certificate/AA

Hagerstown - Data Processing
- o Data Processing, AA

Harford - Computer Information Systems
- o Computer Information Systems, AA
- o Computer Programming, Certificate

Howard - Data Processing
- o Data Processing, Certificate/AA

Montgomery - Computer Science and Technology
- o Business Programming, AA
- o Computer Science, Certificate

Prince George's - Computer Technology
- o Computer Programming and Analysis, AA
- o Computer Management, AA
- o Computer Programming, Certificate
- o Microcomputer Applications, Certificate

Wor-Wic Tech - Computer Programming
- o Programming and Microcomputer Operations, Certificate/AA

Table 2

ENROLLMENT, DISCIPLINE COSTS, AND AWARDS
IN DATA PROCESSING/COMPUTER PROGRAMMING OCCUPATIONAL PROGRAMS

	1981	1982	1983	1984	1985	% Change 1981-1985
Headcount Enrollment in Program (Fall)						
Full-time	2,513	3,349	3,425	2,518	1,632	-35
Part-time	6,433	8,737	9,907	8,353	6,883	7
Total	8,946	12,086	13,332	10,871	8,515	-5
Course Enrollment and Costs (fiscal year)[a]						
FTE Students						
Data Processing/Computer Programming	2,871	3,756	4,771	4,555	3,864	35
Cost/FTE						
Data Processing/Computer Programming	$2,276	$2,322	$2,485	$2,680	$3,071	35
Cost/FTE, All Occupations	$2,428	$2,612	$2,799	$3,031	$3,198	32
Awards (fiscal year)						
Certificates	105	177	279	332	311	196
Associate in Arts degrees	385	463	598	742	769	100
Total	490	640	877	1,074	1,080	120

[a] Full-time equivalent (FTE) enrollment includes all students enrolled in data processing courses, i.e., those majoring in data processing plus those just taking data processing courses.

Full-time equivalent enrollment (i.e., credit hours taught), on the other hand, has declined more moderately over the same period of time suggesting that more non-majors and majors from other fields of study are taking data processing courses. This has helped to moderate the cost per FTE in the Data Processing/Computer Programming discipline. As shown in Table 2, the cost per FTE for Data Processing/Computer Programming was actually less than the average cost per FTE for all occupational programs ($3,071 vs. $3,198) in FY 1985.

The dramatic decline in students majoring in Data Processing/Computer Programming is not yet reflected in the number of associate degrees and certificates that have been awarded. In fact, the 1985 graduating class was the largest ever for the Data Processing/Computer Programming program--nearly 1,100 students statewide.

What types of students enroll in the Data Processing/Computer Programming program? The State Board enrollment information system provides specific answers to this question (Table 3). Fifty-seven percent of the Data Processing/Computer Programming students are women; this compares to 60 percent for all community college programs. Black students account for 22 percent of the enrollment in Data Processing/Computer Programming programs, comparing favorably to enrollment by black students in all community college programs which was 17 percent for 1985. A higher percentage of students are enrolling part-time in Data Processing/Computer Programming programs than in other programs, 81 percent to 74 percent. As a result, Data Processing/Computer Programming students have a relatively low average credit load. Data Processing/Computer Programming students have about the same mean age as other community college students; however their median age is higher, indicating that Data Processing/Computer Programming programs enroll a higher proportion of adult learners.

Montgomery College has the largest Data Processing/Computer Programming program in the State, followed by Prince George's, Catonsville, Anne Arundel, and Essex. These five institutions enrolled over 5,800 Data Processing/Computer Programming students in Fall 1985, or nearly 70 percent of the statewide total.

Why do students enroll in this program? The State Board's graduate follow-up surveys provide data on the primary reason for enrolling in Data Processing/Computer Programming programs (Table 4). With one very important exception, the reasons are identical to those given by community college students in other programs. Twenty-six percent of the Data Processing/Computer Programming students indicated they enrolled in the program to help them prepare for a <u>different</u> job. This compares to only 15 percent of students in other programs giving that reason for attending a community college. The Data Processing/Computer Programming curriculum clearly is being used by many students for accomplishing a successful career change. Also of note, although Data Processing/Computer Programming is an occupational program, about one-fourth of the students who enter the program plan to transfer to a four-year college.

<u>Program Performance</u>

What success do graduates have in achieving the goals they had set for themselves when entering the community college? Data from the State Board's graduate surveys provide some useful indicators on this question (Table 5).

Table 3

CHARACTERISTIS OF CREDIT STUDENTS
FALL 1985

	Data Processing/ Computer Programming		All Programs	
	Number	Percent	Number	Percent
College				
Allegany	93	1		
Anne Arundel	899	10		
Baltimore	586	6		
Catonsville	1,137	12		
Cecil	67	1		
Charles	477	6		
Chesapeake	120	1		
Dundalk	274	3		
Essex	529	8		
Frederick	252	3		
Hagerstown	201	2		
Harford	341	4		
Howard	186	2		
Montgomery	1,924	25		
Prince George's	1,319	15		
Wor-Wic Tech	110	1		
Total	8,515	100%		
Sex				
Male	3,680	43	38,143	40
Female	4,835	57	56,965	60
Race				
Black	1,861	22	15,704	17
White	5,806	68	70,747	74
Other/Unknown	848	10	8,657	9
First-time Status				
New to college	1,628	19	26,868	28
Returning to college	6,887	81	68,240	72
Attendance Status				
Full-time	1,632	19	24,562	26
Part-time	6,883	81	70,546	74
Number of Credits				
Mean	6.6		7.2	
Median	5.6		6.0	
Age in 1984				
Mean	29 years		29 years	
Median	27 years		25 years	

Table 4

PRIMARY REASON FOR ATTENDING COMMUNITY COLLEGE

	Data Processing/ Computer Programming		All Programs	
	Number	Percent	Number	Percent
Explore new academic area	27	5	278	5
Prepare for first job	132	24	1,116	21
Prepare for different job	145	26	760	15
Update current job skills	40	7	468	9
Prepare for transfer	124	23	1,478	28
Self-enrichment	40	7	602	12
Explore new occupation	32	6	299	6
Other reason(s)	9	2	190	4
Total	549	100%	5,191	100%

Source: Follow-Up Survey of 1984 Graduates.

Table 5

FOLLOW-UP OF
DATA PROCESSING/COMPUTER PROGRAMMING GRADUATES

	1982 Graduates (N = 344)	1984 Graduates (N = 958)
	Percent	Percent
Employed full-time in		
Directly related job	37	31
Somewhat related job	13	23
Unrelated job	9	10
Employed part-time	19	20
Transferred, not employed	10	9
Seeking work, not employed	11	6
Military, home responsibility, other	1	1
Total	100	100
Transferred, regardless of employment	35	41
Achieved goal	80	78
Satisfied with instruction in program	98	98
Among Full-time Employees		
Median annual salary	$16,500 (N = 163)	$18,003 (N = 225)
Began new job after college	41%	50%

Note: Graduates are surveyed about nine months after graduation.

About 80 percent of the Data Processing/Computer Programming graduates said they had achieved their goal. Ninety-eight percent of the graduates reported they were satisfied with the quality of instruction in their program. The median annual salary of Data Processing/Computer Programming graduates was over $18,000 for the 1984 graduating class.

Perhaps the most important consideration in assessing program performance is the extent to which graduates find jobs that use their skills. Fifty-four percent of the 1984 Data Processing/Computer Programming graduates were employed full-time in a job related to their training. Of those employed full-time, 50 percent began their present job after leaving the community college. Table 6 shows how these results compare with other occupational programs. The job placement record of the Data Processing/Computer Programming program is slightly below average; the percentage of students successfully using the program to train for a new full-time job after college is also just below the average for all occupational programs. Both of these comparisons may be explained by the much higher percentage of Data Processing/Computer Programming graduates (41 percent) who go on to do transfer work at a four-year college; this compares to 28 percent for graduates of all occupational programs.

Evaluations Conducted by the Colleges

The colleges were asked to respond to four specific questions in their review of the Data Processing/Computer Programming program:

- What steps are being taken to attract and retain qualified, full-time faculty?
- What success has the college had in keeping up with the high equipment costs associated with this program? Describe the nature and scope of recent equipment acquisitions.
- What trends in the rapidly changing data processing field do you see as most critical to the future direction of this program? How is the college responding to these trends?
- What factors account for the declining enrollment in this program?

Small community colleges in rural areas have experienced difficulties in attracting qualified full-time faculty to teach computer-related programs. As an example, one college reported a full-time faculty position remaining vacant for the past two years. Colleges in this situation are considering alterations in their academic rank and salary structure so they can offer salaries more competitive with industry standards. Colleges in metropolitan areas, on the other hand, do not appear to be having this problem. One college in the Baltimore Metropolitan Area, for example, reported forty-five applicants for one recent full-time vacancy. Similarly, a college in the Washington Metropolitan Area reported over 100 applicants for the eight computer science faculty vacancies that occurred during the 1984-85 academic year. Once faculty are hired, a number of programs and opportunities are offered to keep them at the college: (1) tuition reimbursement for graduate work; (2) financial support for staff development activities, such as seminars and industry-sponsored training; (3) sabbatical leaves; (4) flexible teaching schedules to accommodate professional activities; and (5) access to state-of-the-art equipment.

Table 6

EMPLOYMENT AND TRANSFER AMONG GRADUATES OF OCCUPATIONAL PROGRAMS
(Listed in order of highest placement rate)

HEGIS Code	Program Title	Total Sample	Employed full-time in field of training	Among full-time employees who began new full-time job after college	Transferred
5005-01	Secretarial Science	208	74	69	9
5310-01	Electronics	110	71	60	28
5208-01	Nursing, Registered	489	66	85	13
5207-01	Radiology	20	65	77	20
5001-01	Business	174	64	30	41
5002-01	Accounting	155	59	41	26
All occupational programs		2,605	58	57	28
5202-01	Dental Assisting	21	57	91	19
5004-01	Management	76	55	40	41
5012-05	Commercial Art	24	54	53	29
5503-01	Early Childhood Education	28	54	21	32
5101-01/ 5103-01	Data Processing/Computer Programming	458	54	50	41
5599-01	Legal Assistant	21	52	58	24
5205-01	Medical Laboratory Technology	21	52	71	29
5209-01	Practical Nursing	31	52	82	16
5505-01	Law Enforcement	95	51	48	44
5104-01	Computer Operator	68	46	61	16
5004-08	Retailing	33	46	35	42
5503-03	Child Care	22	46	46	23
5216-01	Mental Health	42	41	55	38
5010-01	Hotel Management	20	35	54	40
5008-01	Communications	33	9	75	39

NOTES:
(1) FY 1984 graduates were surveyed in 1985.
(2) Part-time employment is not shown.
(3) Programs with fewer than 20 respondents are not shown.
(4) Transferred refers to any amount of transfer work done; a graduate can report simultaneous status as employed and transferred.

For the most part, colleges have had good success to date in keeping up with the high equipment costs associated with Data Processing/Computer Programming programs. Batch computing has given way to on-line interactive computing within what might be called a "balanced" computing environment. On the one hand, colleges have expanded mainframe capabilities. One college, for example, has increased the number of terminals attached directly to its mainframe from 36 to 120 over the last three years. At the same time, colleges have made major investments in microcomputer acquisitions. Several colleges reported special expenditures in the Spring 1985 semester of nearly $200,000 for microcomputers alone. Perhaps most importantly, the colleges are turning to new and innovative ways to get the most computer for their limited dollars: (1) educational discounts from manufacturers or through State purchasing agreements; (2) successful grantsmanship, especially Title III and federal vocational education monies; (3) donations from manufacturers in exchange for faculty work on software development; (4) long-term payback agreements; (5) student laboratory fees to offset equipment costs; (6) shared usage of computer facilities so that costs are spread across many academic programs as well as administrative applications; (7) generating revenue by contracting with outside clients, including local schools, to provide data processing services; (8) shifting from high-cost rental agreements to less costly lease-purchase arrangements; and (9) maintaining efficient computer installations through the discontinuance of obsolete equipment and the high costs associated with maintenance.

On the question of emerging trends in the changing data processing field, the colleges were virtually unanimous in their conclusion that the single most important trend is the development of more powerful, faster, and less expensive microcomputers. This has enabled more companies, government agencies, and even individuals to purchase their own computer systems, thereby creating an enormous demand for conceptual learning and microcomputer skill training among an entirely new group of clients. As indicated in Table I, at least six colleges have developed certificate programs to respond to this growing need in their service area. A second important trend identified was networking and, in general, data communications capabilities.

Several explanations are offered by the colleges for the recent enrollment decline in Data Processing/Computer Programming programs throughout the State. One factor has been the reduction in the number of high school graduates. An improving economy also has been a factor as the need for training among the unemployed has diminished proportionately. Also, several colleges describe the current enrollment decline as an inevitable pulling back from an earlier unprecedented media blitz and general public interest in computers which resulted in an enrollment "bubble" that could not be maintained over the long term. Finally, many students are recognizing that rapid advancement in the data processing field will require more than a two-year degree and, thus, are moving into the computer science and information systems management transfer programs at the community college. As to the future status of enrollments, most colleges anticipate a relative stabilizing at the current level, plus or minus 10 percent. At the same time, expectations are for substantially increased enrollment in credit courses taken by non-majors and in noncredit training activities.

Recommendations

1. For those colleges experiencing difficulty hiring full-time faculty for the Data Processing/Computer Programming program, consideration should be given to the

following actions: (a) revision to academic salary structures consistent with supply and demand forces operating with the market place, (b) development of faculty recruitment procedures recognizing industry experience in lieu of academic credentials, and (c) use of current part-time faculty as a potential recruiting pool.

2. A top priority for colleges striving to offer a top notch Data Processing/Computer Programming program must be to provide a hardware and software environment that is state-of-the-art. Toward that end, colleges should consider a number of strategies to stretch the dollars available for equipment purchases, including the following: (a) educational discounts from manufacturers or through State purchasing agreements; (b) successful grantsmanship, especially Title III and federal vocational education monies; (c) donations from manufacturers in exchange for faculty work on software development; (d) long-term payback agreements; (e) student laboratory fees to offset equipment costs; (f) shared usage of computer facilities so that costs are spread across many academic programs as well as administrative applications; (g) generating revenue by contracting with outside clients, including local schools, to provide data processing services; (h) shifting from high-cost rental agreements to less costly lease-purchase arrangements; and (i) maintaining efficient computer installations through the discontinuance of obsolete equipment and high maintenance costs.

3. Computers are at the leading edge of change in the American culture and hence more subject to market influences than traditional fields. Faculty, as well as administrators working in this area, must continually recommit themselves to staying responsive to the changing needs of college constituencies. In this regard, a program advisory committee is critically important. The State Board for Community Colleges sees the program advisory committee as important in all program areas, but especially so in rapidly changing high-tech programs like Data Processing/Computer Programming. Several colleges reported they do not currently have program advisory committees in place for their data processing and computer technology programs. These colleges are encouraged to officially activate and convene a data processing program advisory committee as soon as possible.

4. If they have not already done so, colleges should give strong consideration to expanding microcomputer offerings to include short-term continuing education training modules, regular semester length credit courses, and fully integrated credit certificate programs.

5. Given that the four-year degree is fast becoming a minimum requirement for many entry-level programming positions and given the fact that a large percentage of students enrolled in Data Processing/Computer Programming programs go on to transfer to a four-year institution, community colleges should develop strong articulation agreements with the University of Maryland, the State universities and colleges, and out-of-state institutions whenever possible.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Allegany Community College

PROGRAM TITLE: Business Administration Transfer

PROGRAM HEGIS NUMBER: 4970-01 LEVEL OF AWARD: AA

1. What factors account for a satisfaction with preparation for transfer that is below the State average?

Of the fifteen Business Administration graduates responding to the 1982 graduate follow-up, ten indicated they transferred after graduating from ACC. Of these ten transfer students, nine indicated that they were either "satisfied" or "extremely satisfied" (thus the 90 percent satisfaction rate reflected on the PDM printout for this item). The remaining student did not respond to this item (or other items dealing with the transfer issue) most likely due to the fact that this student did not transfer to a four-year school but returned to ACC to pursue a second program of study. Therefore, no Business Administration Transfer student indicated that he/she was "unsatisfied" with preparation for transfer received at ACC.

In a further attempt to investigate this issue, results of the 1984 graduate follow-up (not yet reflected on the PDM display) were examined. Ten of sixteen graduate respondents from this survey indicated they had transferred. All ten students were "satisfied" or "extremely satisfied" with the preparation for transfer received at ACC.

2. What factors account for a goal achievement rate that is below the State average?

The ten 1982 Business Administration graduates who transferred following ACC graduation indicated that their reason for attending ACC was to "prepare for transfer to a four-year institution". When asked whether this goal had been achieved, seven of ten said "yes" (thus, the 70 percent rate indicated on the PDM printout display). Two of the three remaining students said "no," their goal had not been achieved. However, when checking Part 2 of the follow-up survey, it was seen that these two students had, in fact, transferred to a four-year institution; thereby indicating goal achievement. The third student did not respond to Item C (goal achievement). Again, this was the student who returned to ACC to pursue a second program of study after fulfilling graduation requirements in Business Administration.

Results of the 1984 graduate survey show that all Business Administration graduates who transferred subsequent to ACC graduation indicated they had achieved their goal by the time they graduated from Allegany Community College.

Therefore, considering the above information, the college considers goal achievement rates recorded for 1982 graduates to be misleading. This is substantiated by the fact that the goal achievement rate for 1984 graduates is 100 percent.

3. What factors account for grades at the transfer college that are below the State average?

Fifty-one percent of the Business Administration graduates statewide report that they have achieved a grade-point average of a "B" or better (above 3.0). Of the ten transfer students from ACC, three students indicate they have a grade-point average of 3.0+ at their transfer schools (thus the 30 percent reflected on the PDM printout display). However, two of the ten students did not respond to the item, one of whom had not yet completed a full semester at the transfer institution at the time of the survey. The other student who did not respond is re-enrolled at ACC.

The GPAs of the remaining five students were examined and a comparison made between exiting ACC grade-point averages and GPAs at the transfer institutions. This comparison revealed that three of these five students graduated with "C" or "C+" averages from ACC and also are doing "C" or "C+" work at the four-year school. The remaining two students had a low "B" average upon graduating from ACC (3.1 and 3.2 respectively). These are the only two students of the ten ACC transfer students who indicate they are performing less well academically at the transfer school than they had at ACC. Because of the limited number of students generating this "flag" on the PDM display, the validity of the "flag" can be questioned. Although the college is greatly concerned that all of its students do well at their chosen transfer institutions, these few students alone do not justify an assumption that all ACC Business Administration students are not performing well. Indeed the academic curve seems to be "normal" with three of ten students doing "B+" or "A" work and seven students doing at least "B" or "C" work. No student has reported performing below a "C" level.

It is realized by the college that the academic success of a student is related not only to previous coursework, but also to the characteristics the student brings to the situation, e.g., intellectual ability, determination, time and effort devoted to studies, among others.

The college has performed studies in the past and has future studies planned which will monitor the transfer success of all ACC transfer students. Business Administration transfer students will be included in these studies and their success rates as reflected through grade-point averages will be noted.

4. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

It is felt that the quality of this program is good. All 1980 and 1982 Business Administration graduates responding to the follow-up studies have indicated satisfaction with the instruction in the program. Courses in this program are taught by full-time and part-time faculty who have related degrees in business, management, and/or accounting, along with many years of direct experience in teaching and the commerce/business field.

5. What action does the college plan to take to address the above issues?

The issues of "goal achievement" and "grades at transfer institutions" have been addressed in questions (2) and (3) above. Regarding the issue of "satisfaction with preparation for transfer", the college has placed a renewed emphasis on transfer advising during this current fiscal year, not only for Business Administration transfer students but for all ACC students who plan to transfer to another higher education institution upon leaving ACC. An all-new transfer advising office has been established in a remodeled area of the Humanities Building for this purpose. A full-time staff member has been assigned responsibility for the coordination of all transfer issues. All pertinent reference documents such as other colleges' catalogs have been centrally located in this office. The college has held several "transfer information sessions" for interested students and several more sessions are planned for the upcoming Spring 1986 semester. It is felt this renewed commitment to strengthening the transfer function of the college will benefit the transfer student through ease of transfer, minimization of the loss of credits upon transfer, and increased satisfaction with transfer preparation.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The PDM flag "satisfaction with transfer preparation lower than State" is based on the number of students indicating they were "extremely satisfied" with the program. On that criterion, Allegany's Business Administration Transfer program was considerably below the statewide average in the 1982 graduate follow-up (10 percent extremely satisfied at Allegany compared to 45 percent statewide).

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Allegany Community College

PROGRAM TITLE: Data Processing Technology

PROGRAM HEGIS NUMBER: 5101-01 LEVEL OF AWARD: AA

1. What steps are being taken to attract and retain qualified full-time faculty for this program?

   If the Data Processing Department has an opening for a full-time faculty position, the director does a needs assessment for the department and, with the Vice-President for Instructional Affairs, prepares an advertisement for the position. The position is advertised locally and in metropolitan areas where computer technology is prevalent. An advertisement is also placed in the Chronicle of Higher Education. A search committee is formed to evaluate the candidates. A search procedure is strictly followed to ensure that only qualified candidates are selected for personal interviews. The committee makes the final selection after a complete check has been made on all references and transcripts.

   All full-time faculty are encouraged to keep up with the changing technology in data processing in various ways. Training courses are paid for by the college. "Mini-sabbaticals" are provided by the college for seminars and specialized training. Tuition reimbursement for post-graduate studies is also provided by the college. Microcomputers are made available by the department for any type of personal or professional enrichment. Although salaries are low by State standards, faculty are able to supplement their incomes with overloads and continuing education courses.

2. What success has the college had in keeping up with the high equipment costs associated with this program? Describe the nature and scope of recent equipment acquisitions?

   Most equipment purchases are done using a competitive bid process with educational discounts; but the college has been successful in receiving grants and donations from major computer equipment manufacturers in exchange for software developed by the college and/or being used as a site for developing software. Long-term payback agreements also have been used to secure expensive equipment.

3. What trends in the rapidly changing data processing field do you see as most critical to the future direction of this program? How is the college responding to these trends?

   The most critical trend in data processing is the use of microcomputers instead of larger mainframe computers. Microcomputers are rapidly appearing in businesses, as well as in the home, and are becoming so versatile that they are replacing many terminals that used to be connected to mainframes. The college is responding to this trend by offering two options in the Data Processing Technology curriculum in the Fall of 1986. One option is designed for mainframes (current program) and the other is for microcomputers and interactive programming.

4. What factors account for the declining enrollment in this program?

It is felt that there are five major reasons for the declining enrollment in the Data Processing Technology program:

a. Some students heard that there were many jobs available in data processing and decided to take the program for that reason. Unfortunately, many of the students did not prepare for this difficult program in high school and were unable to handle the courses.

b. Some students were undecided about what to take in college and were advised by high school guidance counselors and college counselors to take data processing because that is where the jobs were. Again, the students were not prepared for this program and could not handle the courses.

c. Some students only wanted to take one or two courses in data processing and were placed in the program so they would have a data processing faculty advisor.

d. The program is difficult and very time-consuming for the students. The working students and married students had to make many sacrifices to complete the program.

e. The local job market is now poor. Students willing to relocate can find jobs, but students unwilling or unable to relocate have trouble finding jobs.

5. At what level does the college expect the enrollment to stabilize?

Enrollment will stabilize at the current level or may decline slightly. Even with the new Microcomputer and Interactive Programming option, it is expected that enrollment will remain relatively stable for the next two to three years.

6. For graduates who secured full-time employment, list all of the occupational titles reported on the most recent follow-up survey.

computer programmer
computer operator
technical analyst
administrative specialist
data processing laboratory assistant
secretary/computer operator

7. Describe the contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

   The program director or data processing faculty members have made contact with almost every local employer and discussed the needs of the program. Also, the program director has contacted and visited many other community colleges, larger metropolitan area employers, and former students now employed concerning the curriculum and the need for the program.

   The Data Processing Technology Curriculum Advisory Committee meets twice a year and has approved every change or addition to the curriculum for the past two years. This includes the new Microcomputer and Interactive Programming option for 1986. All members of the advisory committee employ graduates of the program.

8. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

   The college believes it has an excellent program with experienced instructors, up-to-date equipment, and a program that not only offers a quality theoretical education but actual "hands-on" experience to the students.

9. If you were asked to give one piece of advice to your community college colleagues throughout the State on data processing AA and certificate programs, what would that advice be?

   Go to the high schools and prepare the students for the Data Processing Technology curriculum; advise the guidance counselors at both the high school and college levels about what a student should do to prepare for the program; and develop survey level courses for non-majors and entrance requirements for students majoring in Data Processing Technology.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The college should review the recommendations made in the statewide evaluation of data processing programs and implement those recommendations it deems appropriate for its program.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Allegany Community College

PROGRAM TITLE: Forest Technology

PROGRAM HEGIS NUMBER: 5403-01 LEVEL OF AWARD: AA

1. What factors account for the declining enrollment in this program?

Fall enrollment data reflected on the PDM printout display are only partially correct. Although the enrollment figures for 1979, 1980, 1983, and 1984 are correct, enrollments for 1981 and 1982 are incorrect. The 1981 enrollment was 38 instead of 48; 1982 enollment was 34, not 42. Current enrollment for Fall 1985 semester in Forest Technology was 31 students. These corrections and current information provide a more accurate picture of the enrollment trends in Forest Technology over the past several years.

Fall 1980 = 42
Fall 1981 = 38
Fall 1982 = 32
Fall 1983 = 37
Fall 1984 = 27
Fall 1985 = 31

Program enrollment rather than "declining steadily" can be more accurately described as "fluctuating". The chart above indicates that enrollment did decline from 1980 through 1982, then increased in 1983, declined in 1984, but has increased again this year (1985).

2. At what level does the college expect the enrollment to stabilize?

With a renewed college commitment to marketing and recruiting for the Forest Technology program, it is hoped that enrollment for Forest Technology will stabilize at twenty or more freshmen per year, beginning Fall 1986. Information on steps the college has taken during the current fiscal year as regards to marketing and recruitment is described in the response to question (9) below.

3. What factors account for the low placement of students in full-time jobs related to their field of training?

The coordinator of forestry programs at ACC indicates the job placement for Forest Technology graduates is not low. An update of the 1980 and 1982 graduate surveys on PDM shows that since May of 1983, ACC has graduated 30 students in Forest Technology. Twenty-seven of these graduates have been employed in Forestry or a closely related field. One student is serving in the military. Information on the remaining two graduates is unavailable.

4. For graduates who secured full-time employment, list all of the occupational titles reported on the most recent follow-up survey.

1984 graduate follow-up:

mapping technician
forest technician
equipment operator and surveyor (military)

5. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

Program faculty are in constant contact with the Maryland Forest, Park, and Wildlife Service, the largest employer of ACC graduates. This department has stressed a need for and satisfaction with our graduates. Twenty-six of the 48 technician positions in the State are filled by ACC graduates.

The college faculty are also in constant contact with Westvaco, an important industrial employer of ACC graduates. This corporation has hired more than twenty ACC graduates and rates them as being of superior quality.

The college also is in continual contact with Bartlett Tree Experts, an important employee of ACC graduates. They stress the continuing need for and quality of our graduates.

The Forest Technology Program Advisory committee is statewide in makeup and generally meets once a year. However, the Committee has met three times during the past year. The chairman is local and is in constant contact with program faculty. Emphasis in the past two years has been on recruitment and securing the technical program at ACC.

There are eleven members serving on this advisory committee. All are potential employers or are associated with potential employers of ACC graduates. Eight members are from organizations that have employed ACC graduates.

6. What factors account for a discipline cost per credit hour that is much higher than the average discipline cost per credit hour at the college?

The primary factor causing a discipline cost per credit hour that is higher than the average is the high direct cost (salaries and fringe benefits) of the program faculty members, holding the rank of full professor and both having 15 years seniority at ACC. The high direct cost, coupled with the fact of a relatively low number of student credit hours being generated, causes a high discipline cost using the SBCC's method of calculation.

7. This program was identified for a qualitative evaluation several years ago. What actions were carried out by the college in response to that evaluation, and what was their effect on the program?

The college had considered discontinuance of the Forest Technology program. However, due to an overwhelming public response, the administration has instituted an active marketing and recruiting program for Forest Technology in the hope of increasing enrollment and continuing this program which serves a definite need in the community. The immediate goal is to recruit a freshman class for Fall 1986 of 20 or more new students. If, by June 15, 1986, the college has less than twenty first-year students, but at least fifteen enrolled (and enrolled for first-year classes), then ACC could continue the program by accepting and serving the Fall 1986 freshman class and operating the program with reduced staffing. If less than fifteen such students enrolled by June 15, 1986, then ACC would not accept and serve a freshman class for Fall 1986. Enrollment did increase this Fall and the college is already getting a higher than normal number of inquiries for next year. The college is striving to reduce attrition without reducing the quality of the program.

8. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

The quality of the Forest Technology program at ACC is excellent.

9. What action(s) does the college plan to take to address the above issues?

Some actions the college has already initiated and will continue include the following:

The college has established a forestry scholarship program; and already has acquired six partial- to full-tuition scholarships.

The program has been placed under the supervision of Dr. Glenn Workman, one of the more experienced faculty members in the field of marketing. Under his direction, the college has initiated an extensive, in-depth marketing approach to increasing enrollment in the Forestry Technology program. This approach has included contacting all former alumni of the program, all of the science supervisors, biology teachers, and school counselors in Maryland, along with those in the neighboring counties of Pennsylvania, West Virginia, and the District of Columbia. The college has contacted the State's Future Farmers of America (FFA) organization and all Vocational Agricultural (Vo-Ag) teachers in the State and has worked with the State Veterans' Administration. All State unemployment offices have been contacted. Dr. Workman has met with Dr. Boyd Robinson, Maryland State Department of Education, arranging for a Spring and Summer forestry workshop for all Vo-Ag teachers in the State to be held on ACC's campus.

Program faculty have initiated plans for securing a State FFA forestry test which would be administered through ACC with the winners qualifying for the national competition in Kansas City.

During December 1985, Ms. Charlotte Baker, editor of Maryland Farmers' Magazine, will be interviewing two female freshmen and two female sophomores of ACC's Forest Technology program for inclusion in an article highlighting the role women play in the field of forestry.

Finally, every company or business that has ever hired an ACC forestry student has been contacted, along with other related businesses in the immediate Tri-State area.

All of these efforts have helped publicize the college's Forest Technology program and have increased awareness as to the quality of the program and the high degree of success in placing graduates.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The college is asked to keep the SBCC informed on whether the enrollment goal for this program is achieved in Fall 1986 (20 first-year students) and what the implications are, if any, for the continuation of the Forest Technology program at Allegany.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Anne Arundel Community College

PROGRAM TITLE: Office Technology

PROGRAM HEGIS NUMBER: 5005-01 LEVEL OF AWARD: Certificate/AA

1. What success has the college had in keeping up with the high equipment costs associated with this program? Describe the nature and scope of recent equipment acquisitions.

The college has had moderate success in keeping up with the high equipment costs associated with the Office Technology program. Most of the equipment acquisitions have been the direct result of federal funds through the Division of Vocational-Technical Education, State Department of Education.

Nature and scope of recent equipment acquisitions:

	Equipment	Purchase Date
a.	Five IBM PC's with MultiMate software	1 on 5/21/84 2 on 10/29/84 2 on 4/19/84
b.	One Dictaphone 6000 stand-alone dedicated word processor	4/26/83
c.	Four Xerox 620 Memorywriters	2 on 4/26/83 2 on 6/27/83
d.	One Xerox 630 Memorywriter	5/6/83
e.	Four Vydec word processors	1146--8/4/80 1800--8/4/80 1400--10/9/81 1400--10/9/81
f.	One IBM 60 electronic typewriter	5/29/75
g.	Twenty-five Brother 80 electronic typewriters	7 on 3/20/84 13 on 3/16/84 5 on 4/25/84
h.	Projected purchase of Wang multi-terminal shared logic system with four terminals	Fall 1985

2. What trends in the rapidly changing office automation field do you see as most critical to the future direction of this program? How is the college responding to these trends?

Interfacing, interconnecting, and networking various technologies is a critical trend in the field of office automation. The college is responding to this trend, specifically, the lecture course, Word Information Processing Concepts. This course emphasizes all of the office automation technologies and their interrelationships. Additionally, the college's planned equipment purchase of a Wang shared resource system will strengthen the networking concept to some extent.

When the college has completed its own information network it proposes to utilize the equipment for demonstration purposes at the very least.

Another critical trend is toward "information processing" rather than separate word and data processing. This trend emphasizes the use of personal computers to process all information using various software packages. The college is addressing this trend by offering, for the first time in the Spring semester of 1986, multiple software packages on the IBM PC.

3. For graduates who secured full-time employment, list all of the occupational titles reported on the most recent follow-up survey.

This list of job titles is from the follow-up survey of 1984 graduates. It is a list of all Secretarial Technologies program respondents working full-time.

office manager
secretary-stenographer
receptionist-secretary
executive secretary
warranty clerk/typist
quality assurance clerk
property disposal specialist
business teacher
secretary/receptionist
secretary, research
coordinator, work experience
stenographer
sales associate
executive secretary
personnel assistant
instructional aide
secretary (16)
administrative assistant
office clerk
clerk-typist
secretary-word processor
legal secretary
faculty secretary
secretary II (4)
buyer
secretary I (1)
associate broker
flight attendant
word processor (1)
computer operator (1)
warranty clerk

4. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

Contacts with employers about the program include the following:

a. Regular (every semester) field trips for students to local employers.

b. Speaking engagements by faculty:
   Chamber of Commerce of Glen Burnie
   National Association of Women in Banking
   Insurance Women of Anne Arundel County
   Clerical Staff of Research & Development Division of National Security Agency

c. Personal contacts with employers from:
   Maryland State Legislature
   Anne Arundel Community College
   U.S. Government Accounting Office
   Anne Arundel County Government
   Westinghouse
   FBI
   Anne Arundel County Board of Education
   NSA
   State Farm Insurance Company
   Manpower
   Kelly Girls
   Arinc
   Great Inns of America
   U.S. Senate
   U.S. House of Representatives

The Program Advisory Committee meets once a year. The advisory committee agreed with changing the name of the department from Secretarial Science to Office Technology. The committee recommended strongly that equipment be updated, especially the replacement of the four Vydecs, as soon as possible, given the financial constraints of the college.

Four out of five committee members represent organizations that employ AACC graduates.

5. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

The program will be excellent when much needed up-to-date equipment is obtained. The program itself has been updated through recent revisions and new program options. In addition to the Executive Secretarial option, a Word Processing certificate option in 1981 and a Word Processing degree option in 1984 were added. The college is currently seeking approval of an Office Management option. For the word processing option, the college developed a nucleus of three word processing courses consisting of an office automation concepts lecture course, and two hands-on courses--a basic operations course, and an advanced applications course. The proposed Office Management option includes no new courses but rather is a combination of current courses from Office Technology, Business Management, and Electronic Data Processing.

Additionally, the college has revised courses to reduce nonessential prerequisites. The Office Practice I & II courses have been updated and reduced to three credit hours by eliminating redundant and/or non state-of-the-art materials. Faculty including adjunct faculty are extremely well qualified and dedicated.

Equipment acquisitions in 1983 and 1984 (see answer #1) improved the situation, and the proposed purchase of Wang equipment will definitely put the college at a state-of-the-art level of training for Anne Arundel County. Anne Arundel County businesses in general are very heavily Wang users. The two largest employers in the county, NSA and Westinghouse, have recently purchased very large Wang systems.

The college has experienced a slight decline in enrollment in the past two years which can be attributed perhaps to two major factors: (1) The demand for clerical help is so intense that students are able to obtain jobs on the basis of their high school office skills. (According to the State Division of Research and Analysis and the Department of Employment and Training, the Anne Arundel County unemployment rate is a low 3.8 which is well below the national rate of 6.9.) (2) Students majoring in business at the high school level who consider postsecondary education tend to seek management-type programs.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Anne Arundel Community College

PROGRAM TITLE: Communication Arts Technology

PROGRAM HEGIS NUMBER: 5008-01 LEVEL OF AWARD: AA

Preparation for the questions raised by the State Board for Community Colleges included an analysis of a collegewide study of career program graduates conducted during the Spring of 1985 and an analysis of relevant data provided by the Office of Institutional Research at Anne Arundel Community College. The survey was of career graduates over the previous ten-year period and included twenty graduates of the Communication Arts Technology (CAT) program. The Anne Arundel Community College Office of Institutional Research provided student profile data and information on program cost.

1. What factors account for the low placement of students in full-time jobs related to their field of training.

The SBCC-sponsored survey of 1984 graduates of the Communication Arts Technology program at Anne Arundel Community College resulted in four responses from the fourteen graduates. Three of the respondents indicated job placement outside the communications field. One graduate had a position somewhat related to the field.

A separate survey conducted by the Dean of Technical and Career Education at Anne Arundel Community College during Spring 1985 polled all career graduates at AACC over the past ten years. This survey resulted in twenty respondents who had graduated in Communication Arts Technology. In this survey, those who replied indicated their place of employment and their job title. Fourteen of the twenty respondents (70 percent) indicated employment in the media field.

To draw conclusions, several observations and inferences must be made. The number differences in the two surveys are felt to be significant. The twenty replies from the Dean's survey carry more weight than the four replies from the SBCC survey. If the ten-year reach of the Dean's survey is considered in comparison with the one-year span of the SBCC-sponsored survey, an inference can be made that many graduates, while not initially successful in finding employment, maintain an interest in the field and eventually find media-related jobs.

Student profiles are taken at the time of admission. A summary of 178 students recently enrolled in the Communication Arts Technology program shows that 45 percent (80 students) indicate transfer to a baccalaureate degree granting institution as their reason for attending AACC. This same student profile shows that 18 percent (32 students) chose this major to explore a career/academic area. Sixteen percent (28 students) indicated career preparation as their reason for choosing CAT, 11 percent (19 students) chose this major for self-enrichment, and 10 percent (18 students) desired to update their vocational skills.

It is apparent from the student profiles that immediate employment is not the primary reason for majoring in Communication Arts Technology. The largest group of entering students apparently will seek transfer after completing their academic studies at AACC. This is being noted as plans are being made to revise the curriculum. A plan for a transfer option will be forthcoming. Other projected program changes, as a result of this SBCC inquiry, are noted in questions 5 and 6.

Informal discussions with students nearing graduation reveal some surprising insights. Many are not dependent on immediate employment for income. Since they are not income dependent, they express willingness to wait for a suitable position in Anne Arundel County to become available. The most significant portion seems interested in transfer to four-year colleges. Those students seeking advice from counselors are cautioned that transfer is not ideal from this program. It has been apparent to the advisors and instructors in the department that immediate job placement is not the goal of the typical student in this program. Informal contact with graduates shows that many do complete the baccalaureate degree and then find employment at a higher level with the career field. Based on these findings, an improved curriculum option to accommodate transfer students is being planned.

Despite the apparent desires of many students, job placement is considered a vulnerable area and efforts are being made to improve the employment picture for graduates of the two-year Communication Arts Technology career program. Plans are being made to increase contact with advisory committee members, broaden the role of the advisory committee, add appropriate courses, revise the curriculum, and upgrade the facilities. The goal of these efforts is to better define the vocational areas served and to enhance the perception of the program. It is hoped that these changes can be accomplished while still maintaining healthy enrollments.

2. For graduates who secured full-time employment, list all of the occupational titles reported in the most recent follow-up study.

audio-visual technician
engineering illustrator
assistant training analyst
graphics designer
studio technician
media specialist
data management/graphics technician
television director
flight attendant
budget analyst
insurance agent
secretary
office manager
video specialist
photography supervisor
self-employed

3. Describe contacts you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the advisory committee are from organizations that employ graduates of the program?

While the Program Advisory Committee has not had a formal meeting in the past year, a number of informal contacts have been made with committee members as well as other employers. Contacts are maintained with field trips, guest lecturers, professional organizations and personal contacts. In the past when advice regarding the program was formally solicited, two favorite topics usually arose: (1) the need for more specific training in an area reflecting the vested interests of the committee member or (2) a focus on encouraging students to be more reliable, attentive to detail, punctual, among others.

Of the fourteen members of the current advisory committee, three members either employ graduates of the program or have graduates working in their organizations.

Along with a better definition of vocational areas served, the faculty will plan to reorganize the current advisory committee and turn the attention to curriculum matters.

4. What factors account for a discipline cost per credit hour that is much higher than the average discipline cost per credit hour at the college?

Discipline costs for FY 1985 were $3,634 per FTE which compares favorable to costs of similar programs throughout Maryland. This figure represents a 7 percent reduction in cost per FTE for FY 1984, as shown on PDM. Currently, 68 percent of the teaching load is done by four full-time instructors. The remaining 32 percent is carried by five adjunct instructors.

As a technical program, certain Communication Arts Technology program costs can be expected to be higher than those for non-technical programs. Laboratory facilities and the supplies to operate those facilities account for the difference.

The economics of the program must be carefully considered. The quality of the equipment and facilities needs to be maintained so that students are trained on modern equipment in good operating condition. The equipment must also represent what is used in the industry where graduates are employed. This is a necessity to ensure employability of graduates.

5. This program was identified for a qualitative evaluation several years ago. What actions were carried out by the college in response to that evaluation, and what was their effect on the program?

To attract more evening students, a full offering of courses is being advertised and offered at night over a two-year cycle. It is felt that these evening students represent a more serious audience for the program with a greater interest in employment in the field. Marketing efforts are publicizing this approach for the first time and results are not yet available.

Other efforts are being made to advertise and promote the program. A newsletter was sent to 700 students who took CAT courses during 1984-85. Its purpose was to let them know about matters related to course offerings. Plans are being made to produce this newsletter on a regular basis. Increased enrollments and better communication with students are the expected results.

New courses have been developed in photography and computer graphics. The computer graphics course was developed as a result of an employer survey indicating that this skill was needed for those entering the graphic arts field. Computer graphics is a popular course with healthy enrollments. The photography course will be offered for the first time in the Fall 1986 term.

Like other programs at most colleges, this program experiences cyclical enrollment patterns. External factors, such as employment and population shifts, influence enrollment. The long range, overall pattern has been one of stability. This is attributed in part to the quality of the program and the ability of the faculty to keep the curriculum timely.

6. This is a high-cost program with a poor job placement record. Is it vulnerable on those grounds?

The cost of the program was reduced in FY 1985. Attempts are being made to contain costs and maintain the quality of the program. The ratio of full-time faculty to part-time faculty teaching hours is now consistent with other disciplines on campus.

The employment picture for Communication Arts Technology students may not be as poor as the SBCC-sponsored survey indicates. This survey draws conclusions from only four returns. The Dean's survey, mentioned in #1, had twenty returns. Those twenty returns indicate an improved employment outlook for Communication Arts Technology graduates over the long term.

Job placement does continue to be an area of concern for the department. Current efforts at improving communications about the program (the newsletter) should attract the more committed student. Other plans for the current year include a revision of the function and membership of the advisory committee. Program emphasis must be directed toward the student who is less casual and more concerned with a career in the media field.

Improved transfer options are being developed with several four-year schools in the State. By 1987, a transfer option should be available for those students who wish to pursue their studies on the baccalaureate level.

Stable enrollments and new directions, such as computer graphics, seem to indicate viability of the program. This is a unique curriculum that satisfies the creativity and intellectual curiosity while also satisfying the employment needs of a growing segment of the population.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The college is encouraged to reconvene the Program Advisory Committee in 1986 for the purpose of developing and implementing a transfer option in Communications. As for the Communications occupational program, the college should continue to promote and market the program as just that--i.e., a program that prepares students for occupations in the communications field upon completion of the AA. Renewed attention should be given to assessing the job market for these students and in assisting them in securing gainful employment upon the completion of the AA. As an occupational program, the success of graduates in finding jobs will continue to be a major criteria used in evaluating the program.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Anne Arundel Community College

PROGRAM TITLE: Data Processing

PROGRAM HEGIS NUMBER: 5101-01 LEVEL OF AWARD: Certificate/AA

1. What steps are being taken to attract and retain qualified full-time faculty for this program?

To attract qualified full-time faculty, the college sought suggestions from and contacts with advisory groups. External advertising for new positions was listed in newspapers and the Chronicle for Higher Education.

The Computer Technologies Division hired five new instructors in Fall 1985. An additional instructor will be hired for Spring 1986. A new chairman for the division was recruited and is under contract for two years. To provide a working environment that is current, new course proposals and new personal computer laboratories have been implemented.

There is a commitment to provide these instructors with a strong support structure. The college compensates equitably on the basis of work and educational experience. However, there continues to be great competition for services of data processing faculty.

The college provides opportunities for staff development and retraining. Up to $500 annually can be used for education tuition. It is one of the few community colleges that offers academic sabbatical leaves.

2. What success has the college had in keeping up with high equipment costs associated with the program? Describe the nature and cost of recent equipment acquisition.

Anne Arundel Community College has made extensive capital expenditures for the acquisition of new personal computer laboratories, interactive terminals, and portable personal computers. In addition, there has been a need to continually update the "MUSIC" operating system for the IBM 4341 mainframe to purchase additional language compilers.

Purchases since Spring 1985:

55 IBM personal computers	$100,000.00
9 large screen monitors	8,600.00
25 Apple personal computers	19,700.00
Furntiure and tables for PCs	25,000.00
	$153,000.00

3. What trends in the rapidly changing data processing field do you see as most critical to the future direction of this program? How is the college responding to these trends?

Most work environments are incorporating microcomputers into their operation. The Computer Technologies Division has responded to this trend by offering two new certificate programs on the use of microcomputers. Networking of microcomputers has become a necessary concept for both management and instructional users of computers. The Computer Technologies Division currently has submitted a request for funding to network one of the PC labs.

The SBCC staff has offered the following comment on the certificate programs: "Anne Arundel is out in front with meaningful instructional programs, utilizing microcomputers."

4. What factors account for the declining enrollment in this program?

Several years ago many data processing departments were caught by surprise when their enrollments began to decline. The Computer Technologies Division was probably too complacent and had not stayed current. This has been reversed to the extent that Anne Arundel Community College now has one of the most modern computer facilities and the division has introduced new microcomputer courses and certificate programs. Anne Arundel also markets its new program.

5. At what level does the college expect the enrollment to stabilize?

The Computer Technologies Division experienced slight enrollment increases in the past several semesters. With a commitment to properly marketing the new programs, updating of computer facilities, and new programs of study enrollments should stabilize.

6. For graduates who secured full-time employment, list all of the occupational titles reported on the most recent follow-up survey.

The following is a list of job titles from the 1984 data processing follow-up survey:

systems analyst
office secretary
marketing director
manager
secretary
programmer
data entry specialist
computer programmer
bookstore manager
software support specialist
principal engineer
pharmacy technician
assistant engineer
data entry operator
computer operator
peripheral equipment operator
data processing assistant
technical assistant
systems design
equipment service representative
field engineer
assistant manager

7. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

   Two advisory groups were established for EDP and the new microcomputer program. These advisory groups provided input to the two new certificate programs. Approximately 80 percent of the members are from organizations that employ graduates of the program. The groups met twice during Spring 1985.

   Mass mailings were sent to employers to seek advice and to announce new programs. Additionally, employers were invited to campus for a series of luncheon meetings.

8. Make a value judgment about the quality of the program. Is the program quality low? Satisfactory? Excellent?

   The program would be rated as satisfactory and improving. Now that the division has included new certificate programs in microcomputers, it will begin a study of other areas of the EDP program that emphasizes the use of a mainframe. There is a need to review the new Data Processing Manager's Association (DPMA) guidelines and refine current courses.

9. If you were asked to give one piece of advice to your community college colleagues throughout the State on data processing AA and certificate programs, what would that advice be?

   Survey the users of computers and respond to their needs. Incorporate microcomputers with packaged software and applications into existing programs. Look for new markets: small businesses, teachers, home users, and college employees. A concerted effort towards marketing will spread the word that colleges have excellent programs.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The college should review the recommendations made in the statewide evaluation of data processing programs and implement those recommendations it deems appropriate for its program.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Community College of Baltimore

PROGRAM TITLE: General Studies Transfer

PROGRAM HEGIS NUMBER: 4950-01 LEVEL OF AWARD: AA

The General Studies curriculum at the Community College of Baltimore serves a variety of purposes for students. In a study of 1984 graduates in General Studies by the Curriculum Committee, students were found to be using this curriculum for several of the following outcomes:

a. To plan and complete a flexible program of studies for transfer to four-year institutions.

b. To complete an AA degree after transferring from another institution.

c. To complete an AA degree after leaving another curriculum in the college. In most cases, this was done because the student was unable to complete upper-level requirements in the initially chosen curriculum.

d. To report (for FTEs) all students who are qualifying for programs with specific admissions requirements.

At the present time, the General Studies curriculum at CCB is comparable to other community colleges in the State in that a core of twenty-four general education credits are required and that the student has great flexibility in what he or she takes to complete the 62 credits required for graduation. It is labeled primarily as a transfer curriculum, but it should be noted that the Arts and Sciences curriculum better serves this purpose. The Arts and Sciences curriculum, however, does not provide the flexibility that some students desire.

1. What factors account for the declining enrollment in this program?

a. An overall decrease in college enrollment.

b. An improved advisement mechanism for directing students into vocational programs.

c. The program has not been coordinated by counselors and coordinators and no real recruitment exists.

d. In past years, the undecided/undeclared enrollments were moved to the General Studies program.

2. At what level does the college expect the enrollment to stabilize?

Stabilization should run in accordance with the overall stabilization of the college's enrollment. Changes are being planned in the General Studies curriculum (Ad Hoc Committee of the Curriculum Committee, Spring 1985) and this could reduce the number of graduates in this curriculum. In the future, it will not be quite so easy to leave another curriculum to graduate in General Studies. Also, the curriculum will be redesigned with greater structure emphasizing critical thinking.

Recruitment efforts are being expanded at CCB and this should have a positive effect on enrollments in this curriculum since the transfer mission of CCB will be targeted for expansion. The Arts and Sciences curriculum (Bridge Program) has been emphasized and expanded in the past two years (Ford Foundation Grant). The success of this curriculum might reduce enrollment in General Studies as a transfer curriculum.

3. What factors account for a loss of credits upon transfer that is above the State average?

Since many students have left technical curricula to graduate in General Studies, these "tech" courses are specialized and not acceptable to certain programs at transfer institutions. Some students have taken developmental courses as a part of their General Studies degree and these are not acceptable to transfer institutions. After the Fall 1986 semester, students will no longer be allowed to count developmental studies courses for graduation. No credit will be awarded for them.

Elective courses that a student takes in the General Studies curriculum and for the AA degree at CCB are many times not related to the field of study the student pursues at the four-year institution. Once again, these courses many times are highly specialized and technical in nature. Certain four-year institutions require that specialized courses be taken at the junior level and do not recognize completion of that requirement at the community college level. Lack of coordination in this program allows students to make poor choices of elective courses which do not enhance transferability.

4. What factors account for a satisfaction with preparation for transfer that is below the State average?

The rise in the group unsatisfied with preparation for transfer is probably accounted for by the group of students that are essentially misusing the curriculum to obtain an AA degree. These students are most probably ones that entered the college in another program and were not successful. In many cases, the students have not made a wise use of electives in preparation for transfer because of lack of advice and counseling.

Students who graduate from this program may not have originally planned to transfer and thus did not develop a strong program of general studies originally. When they go to a four-year institution, they find that their program is not "satisfactory."

5. What factors account for grades at the transfer college that are below the State average?

   See response No. 4.

6. This program was identified for a qualitative evaluation several years ago. What actions were carried out by the college in response to that evaluation, and what was their effect on the program?

   The general education requirements have been revised and somewhat strengthened (1981) and this is felt to have had a strengthening effect on General Studies. Exit examinations have been instituted in the English 101 course, and this is having positive effects on ensuring writing ability for all students and especially those who transfer in General Studies.

   A mandatory placement policy was passed by CCB's board of trustees on October 28, 1985. It will be partially implemented in Fall 1986 and completed in Spring 1987.

7. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

   At the present time, the quality of the program could be considered to be moderately satisfactory. Many of the students graduating in General Studies use the program for its designed purpose and develop a meaningful program of studies for transfer. Due to its almost completely open nature, the program is being misused by many to obtain an AA degree that might not adequately prepare a student for transfer. It is possible presently for a student to pursue a program which lacks the breadth of knowledge and critical thinking that an AA degree connotes.

8. What action(s) does the college plan to take to address the above issues?

   a. The mandatory placement policy recently approved includes replacing current developmental course offerings with noncredit ones.

   b. The college will soon request a meeting to discuss another HEGIS code being assigned to report students qualifying for special admissions programs.

   c. An ad hoc committee of the Curriculum Committee is working on revision of this program. Research has been collected on General Studies curricula at other two-year colleges in the State and in the nation. A random sampling of graduates in this curriculum was evaluated by this committee to ascertain the nature of the various programs of study in the curriculum. Additionally, this committee is utilizing the AACJC policy statement on the associate degree and other publications to guide in the revision of this curriculum. It is hoped that by FY 1987 a revised General Studies curriculum will be in place that ensures quality of experience, depth and breadth of study, and critical thinking skills. The college is aware of Parnell's Neglected Majority and is doing something about it.

SBCC RECOMMENDATIONS/COMMENTS

The college is to be commended for its mandatory placement policy recently enacted by the board of trustees.

Students with special admissions requirements need not be officially assigned to the General Studies program. They can be reported under HEGIS Code 9909-01, which is reserved for undeclared/undecided students.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Community College of Baltimore

PROGRAM TITLE: Fashion Design

PROGRAM HEGIS NUMBER: 5012-02 LEVEL OF AWARD: Certificate/AA

1. What factors account for the declining enrollment in this program?

   A multiplicity of factors are responsible for low enrollment collegewide. These include the national trends toward decreased enrollment, the recent negative publicity about CCB, lack of a directed, coordinated recruitment/public relations effort by the college, and the rapid decline of Baltimore City high school graduates. This program reflects the overall CCB decline.

2. At what level does the college expect the enrollment to stabilize?

   It is not possible to make an estimate at this time. Any action taken by the college will not result in immediate substantial growth except for special groups, which are usually short-term. Enrollment figures are reported annually in the Fall. In two years time, the college will be able to provide a realistic response.

3. What factors account for the low number of awards in this program?

   The major factor is one common to urban community colleges. Many students enter the program for their own personal development of skills and when they reach the skill level desired, do not continue on to complete the certificate or degree.

4. What does the college consider to be a minimum number of awards for a successful program?

   See response No. 3.

5. What factors account for the low placement of students in full-time jobs related to their field of training?

   The general economy of the Baltimore metropolitan area was very depressed in 1982 and jobs in most fields were scarce. The garment industry was especially curtailed at that time but appears to be rapidly recovering.

6. For graduates who secured full-time employment, list all of the occupational titles reported on the most recent follow-up survey.

The faculty and staff of the Fashion Design program conduct continuous follow-up on their graduates. Data on their location are constantly updated and personal contact is maintained with as many graduates as possible. Based on the faculty's files, graduates from 1982 to 1984 are employed in these positions:

fashion designers
fashion coordinators
store managers (associate/assistant)
fashion illustrators
self-employed (shop owners)
seamstress
cutters
textile designers
freelance fashion designers, illustrators
visual display artist
fashion consultants
millinery designer
shoe stylist
bridal consultants
assistant/associate designers
fashion related sales positions
assistant/associate buyers
fashion editor
tailors
pattern makers/drafters
laboratory assistants
merchandise managers
costume designers
clothing and textile extension agents
fur designer
clothing and textile instructors

The director of institutional research lists these job titles for respondents from the 1984 graduate follow-up survey:

dresser
sales clerk
selling assistant (manager)

7. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

The program coordinator meets with employers in the fashion industry on a continuing basis. Contacts with employers suggest that the industry is in dire need of qualified technologists. A possible option in Industrial Fashion Technology is being considered by the faculty. The advisory committee meets regularly in the Spring of each year. Fifteen of the twenty-six members of the committee are from organizations that employ graduates. Remaining members are from supporting agencies and areas. They support the development of an industrial option as a means toward making the college a training and re-training center for the garment industry in this region and for teachers in related areas.

8. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

Faculty members are well versed in their subject matter. Facilities and equipment are of high quality. Course offerings undergo constant revision in order to remain current with industry trends. This is an excellent program. The rebound in enrollment this Fall, in the face of drastic college declines, is a sign of a healthy program.

9. What action(s) does the college plan to take to address the above issues?

a. The college has already hired a publications specialist who is planning a coordinated program of print materials. The college is currently advertising for candidates for a recruitment coordinator and a technician to implement an integrated and sustained long-range plan for improving enrollment.

b. The college has assigned a staff member to serve as interim coordinator to assist with scheduling, provision of materials, and communications for the members of the college community performing recruitment functions.

c. The program faculty are developing an Industrial Fashion Technology option to be submitted for approval later this academic year.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The college is encouraged to develop and submit to the SBCC for approval the new option in Industrial Fashion Technology.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Community College of Baltimore

PROGRAM TITLE: Business Data Processing

PROGRAM HEGIS NUMBER: 5103-01 LEVEL OF AWARD: Certificate/AA

1. What steps are being taken to attract and retain qualified full-time faculty for this program?

   Recruitment for faculty in this program is done by professional contact through educational and computer organizations, such as the Data Processing Managers Association, among others. Two persuasive factors for first-time hiring are proportionate equation of field experience to academic credentials and tuition reimbursement for graduate study up to twelve credits per year.

   Retention is a more complex matter. Promotions at the college are limited. Although experience is considered, academic credentials are paramount. The improvement of computer laboratory facilities with state-of-the-art equipment is one factor for retention of faculty. The tuition reimbursement policy encourages earning additional academic documentation. Teaching schedules may be arranged to allow pursuit of professional activities which enhance academic effectiveness.

2. What success has the college had in keeping up with the high equipment costs associated with this program? Describe the nature and scope of recent equipment acquisitions?

   In 1982, the department chairperson presented a five-year plan for equipment use and acquisition. The college was able to implement the Technical Center at Harbor Campus in 1984, furnished with HP terminals and line printers, as well as Apples and Decwriters. The related discarding of key punches and sorters lowered the maintenance costs by 50 percent because the equipment was so ancient while the new has minimal maintenance costs. Equipment purchased with Title III funds and dedicated fees (paid by students) enabled a move to a video terminal environment (mainframe connection using HP and Zenith terminals) at both campuses, plus continuing to use the Decwriters. Harbor also has a microcomputer lab which uses Apples to teach four basic level courses.

   The college upgraded the computer hardware in 1985 by replacing two Hewlett-Packard 3000s with a single one of the 6800 series. The department purchased additional terminals and line printers to make fuller use of the enlarged capacity. One of the two off-campus sites where computer classes are offered has access to the agency's IBM mainframe and the other has been provided with a microcomputer lab with HP 150s, TRS 80s, and Apples.

3. What trends in the rapidly changing data processing field do you see as most critical to the future direction of this program? How is the college responding to these trends?

The college has added PASCAL to its offerings and is including instruction with VISICALC and related software. The college anticipates offering Database Management, C-Language, Networking, Data Communication, Computer Literacy courses, and popular software packages in the near future.

4. What factors account for the declining enrollment in this program?

Prerequisites of mathematics and English skill levels were added to the introductory courses as of Fall 1985. A sharp decline was anticipated but retention and quality improvement of the program are expected. A multiplicity of factors are responsible for low enrollment collegewide. These include the national trends toward decreased enrollment, the recent negative publicity about CCB, lack of a directed, coordinated recruitment/public relations effort by the college, and the rapid decline of Baltimore City high school graduates. This program reflects the overall CCB decline.

5. At what level does the college expect the enrollment to stabilize?

It is not possible to estimate enrollment stabilization this year because of the factors mentioned in No. 4 above. The increased decline of jobs in this field statewide may also contribute to an uncertain estimated number in the next year or two. The college would like enrollment in the program to stabilize at about 850 to 1,000 students.

6. What factors account for an enrollment-to-awards ratio that is more than twice the State average?

a. Lack of prerequisites in what is a very demanding program has fostered high attrition.

b. The trend from full-time to part-time has an effect on the award ratio.

c. Availability of jobs in the City in this field attracts students before graduation.

d. The tendency for students to switch to General Studies when advanced courses are hard to schedule or content is too difficult seems high in this program.

e. Some students were dropouts because the college could not afford state-of-the-art equipment until recently.

f. The major factor here may well be the student intent to take only a basic course for minimal skills to retain or change job status.

7. For graduates who secured full-time employment, list all of the occupational titles reported on the most recent follow-up survey.

   From the 1984 graduate follow-up survey:

   computer programmer
   computer teacher
   electrician
   senior bill clerk
   data entry clerk
   tutor (Community College of Baltimore)

8. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

   The college does not have an active formal advisory committee for this program although the chairperson consults frequently with individual members of the old committee. The college intends to re-establish a committee for this program in the immediate future.

9. This program was identified for a qualitative evaluation several years ago. What actions were carried out by the college in response to that evaluation, and what was their effect on the program?

   The college has completed the installation of new central computer hardware and made the laboratory facilities current. The college is limiting enrollment by using prerequisites to help provide the minimum skills needed by students for success in the program. Examination of the 1982 graduate survey indicates an increase in students employed in related jobs and a decrease to zero in non-related ones.

10. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

    The program is average. It is improving steadily due to the upgrading of equipment, staff, and facilities.

11. If you were asked to give one piece of advice to your community college colleagues throughout the State on data processing AA and certificate programs, what would that advice be?

    Complement the full-time instructors with specialized experts from the business community who have current skills and can provide up-to-date information about the applications of computers in business.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The college should review the recommendations made in the statewide evaluation of data processing programs and implement those recommendations it deems appropriate for its program.

The Program Advisory Committee for this program should be re-established and convened as soon as possible.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Community College of Baltimore

PROGRAM TITLE: Dental Assisting

PROGRAM HEGIS NUMBER: 5202-01 LEVEL OF AWARD: Certificate

1. What factors account for the declining enrollment in this program?

   Twenty-four students were enrolled in a special Job Training Partnership Act (JTPA) program in Fall 1983 and completed it before Fall 1984. Therefore, the regular enrollment of the past three years has been 21, 20, and 24.

   The overall low enrollment in this field is reflective of the status of the dental assistant in the profession. The college continues to work towards clearer acceptance of the need for certified, college-trained assistants.

2. At what level does the college expect the enrollment to stabilize?

   The entering class maximum size is established each Spring by the dean of faculty and based on available resources, such as finances, faculty, equipment, among others. The Fall 1985 class for this program was set at 18.

3. What factors account for the low number of awards in this program?

   There are two factors involved. With fewer students in a difficult program, few succeed. Those who complete their clinical work in the Summer do not always follow through the formal graduation procedures the succeeding June. The college also has had a technical problem in reporting that did not allow two awards, such as an AA in General Studies and a Dental Assistant certificate, at the same time. This matter has been corrected.

4. What does the college consider to be a minimum number of awards for a successful program?

   If finances force continuance with only one full-time faculty member, the college would be satisfied with ten awards.

5. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the program advisory committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the program advisory committee are from organizations that employ graduates of the program?

   The program coordinator and/or chairperson for dental auxiliaries is in continuous contact with supervisors at clinical field sites, members of professional dental organizations, and individual dentists. The advisory committee meets twice a year. Among their major concerns has been the low enrollment and high attrition of this program.

Suggestions made by the committee include: (a) direct mail contact with practicing dentists--for recruitment source and publicity; (b) high school contact--for recruitment counselors--career days, among others; (c) contact with professional dental organizations--recruitment and publicity; (d) rearrange some content to modular format and/or non-semester scheduling--lengthen program for student retention.

6. The number of respondents to the follow-up surveys is inadequate to draw a conclusion about the program. Submit additional information for at least fifteen students from surveys of entrants and/or graduates. The surveys can be done by mail or telephone. Present the results in a table comparable to the PDM student follow-up display; salary data are not required.

	n	%
Full-time job, directly related	11	61
Full-time job, somewhat related	1	5
Full-time job, not related	1	6
Part-time job	3	17
Transferred, not employed	0	0
Seeking work, not employed	0	0
Military, home responsibility, other	2	11
Total	18	100
Transferred, regardless of employment	1	5
Achieved personal goal	14	78
Satisfied with program instruction	15	83

7. What factors account for a discipline cost per credit hour that is much higher than the average discipline cost per credit hour at the college?

This is a program with a high supply/equipment cost that also has a low faculty/student ratio. Although it is higher than the college average, it is of lower cost than the Maryland average for similar programs.

8. This program was identified for a qualitative evaluation several years ago. What actions were carried out by the college in response to that evaluation, and what was their effect on the program?

The college has developed a closer articulation with Dunbar High School. Placement tests were administered at Dunbar to establish eligibility for CCB programs. The associate dean of faculty for natural and health sciences was very active in working with the refinement of their program.

The revisions in content made for the prior program accreditation visit have allowed the college to maintain its stability. The graduate is of high quality. In this small program, attrition is high because national standards must be maintained. This also may reflect the deficiencies of the local school system.

9. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

   The program is excellent. This is supported by the 100 percent success rate of graduates passing national boards and obtaining employment.

10. What recommendations have been identified in preparation for the reaccreditation visit by the American Dental Association. What actions does the College plan in response to those recommendations?

    The college is taking the following actions:

    a. The college has already hired a publications specialist who is planning a coordinated program of print materials and the college is currently advertising for candidates for a recruitment coordinator and a technician to implement an integrated and sustained long-range plan for improving enrollment.

    b. Greater emphasis is being placed collegewide on meeting the needs of current students, including additional basic skills support and professional tutoring.

    c. Program faculty will be in continuous contact with each pre-program student through completion of certificate to monitor progress and provide support.

    d. Development of revised scheduling of content material and exploration of modular programming is currently being done by the departmental faculty in collaboration with the program coordinator.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Community College of Baltimore

PROGRAM TITLE: Electronics Technology

PROGRAM HEGIS NUMBER: 5310-01 LEVEL OF AWARD: Certificate/AA

1. What factors account for the declining enrollment in this program?

   Lack of directed recruitment by the college, as well as the national and statewide enrollment declines, explain the program decline. Another factor is that increased enrollment in Fall 1983 was directly related to the then high rate of unemployment (including furloughs) in the community which promoted extra sections of basic electricity and electronics fundamentals courses. When recalls occurred or students found other jobs, they did not continue in the program.

2. At what level does the college expect the enrollment to stabilize?

   The college plans to limit the enrollment in this program to 120 to 150 students.

3. What factors account for the low placement of students in full-time jobs related to their field of training?

   The college interprets the statistics to indicate an increase in related and somewhat related jobs because none of the respondents indicated employment in a non-related position as compared to 14 percent of the prior graduates.

4. For graduates who secured full-time employment, list all of the occupational titles reported on the most recent follow-up survey.

   The follow-up survey for 1984 graduates was the latest one done by the college. The Director of Institutional Research has provided the following job titles reported:

Degree Recipients	Certificate Recipients
electrician and carpenter	laboratory aide
associate engineer	neighborhood coordinator (assistant directory)
control clerk	rent account manager
C.T. service engineer	

5. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

   The college has had formal and informal contacts with Bendix, AAI, Westinghouse, FAA, the Mayor's Office of Telecommunications, and the Baltimore City Vocational Education Department. These are the major employers of the graduates. The recent revision of the Electronics certificate (approved by the SBCC July 1984) and an option in Telecommunications under consideration were suggested by them and members of the advisory committee.

   The advisory committee has not met formally during the past year. Its reactivation has been delayed because a third of the members are now in out-of-state positions; a decision was pending to include it with the committee for the Business Data Processing/Computer Science programs; and a new option would likely change the program direction. Three of the ten members represented major employers.

6. What factors account for a satisfaction with preparation for employment that is below the State average?

   The college has not contacted the survey respondents to determine this.

7. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

   The program quality is satisfactory. Instruction is good but equipment is old.

8. What action(s) does the college plan to take to address the above issues?

   a. The college has hired another full-time faculty member to begin the Spring term. Coordination and recruitment will be among the responsibilities of this second member of the program's full-time faculty.

   b. A new advisory committee will shortly be formed, designated only for the Electronics Technology program.

   c. A new option in Telecommunications is being developed and will be forwarded to the SBCC after internal approvals.

   d. The college is negotiating with a major telecommunications firm to obtain state-of-the-art equipment for the program.

   e. The Office of Institutional Research will conduct a focused follow-up with those graduates who indicate less than 100 percent satisfaction with the programs' preparation for employment to ascertain casual factors.

f. The college has hired a publications specialist who is planning a coordinated program of print materials. The college is currently advertising for candidates for a recruitment coordinator and a technician to implement an integrated and sustained long-range plan for improving enrollment.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The Program Advisory Committee for this program should be re-established immediately. One item that should be high on the committee's agenda is assessing why graduates of this program report a level of satisfaction with preparation for employment that is considerably lower than the average for similar programs throughout the State.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Community College of Baltimore

PROGRAM TITLE: Public Sector Administration

PROGRAM HEGIS NUMBER: 5508-01 LEVEL OF AWARD: Certificate/AA

The Mayor of Baltimore City suggested that the college design a training program for managers in City agencies. Budget restrictions within the City and an emphasis on increased production by current employees precluded active pursuit of students.

The college will forward a request for discontinuance of this program in the near future. The college plans to consider consolidation of Human Services programs and may use Public Sector Administration as an option in a revised format.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The college is encouraged to move forward with a request to inactivate or discontinue this program as soon as possible.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Catonsville Community College

PROGRAM TITLE: Computer Studies/Data Processing Technologies

PROGRAM HEGIS NUMBER: 5101-01 LEVEL OF AWARD: Certificate/AA

1. What steps are being taken to attract and retain qualified full-time faculty for this program?

   The facilities provided are very much state-of-the-art and have proven to be a major attraction for potential faculty. There were forty-five applicants for a recent opening on the full-time staff. There have been specific efforts to provide the faculty with opportunities to learn new developments in the field that help retain faculty who want to maintain professional capability. Faculty have been sent for training in UNIX, C language, and Local Area Networks.

2. What success has the college had in keeping up with the high equipment costs associated with this program? Describe the nature and scope of recent equipment acquisitions?

   The equipment used in this program is shared with administrative applications and many curricula, spreading costs across other programs. The college has obtained funding for equipment by such means as grants, gifts, and contracting with outside clients to provide computer services. The college received Title III grants which helped enhance equipment and has received equipment donations and price reductions from several corporations. In addition, the college has a contract providing service to local public schools and another college. Most recently, the college upgraded to an IBM 4381 mainframe and added over 50 IBM/PCs. Several pieces of equipment from Digital Equipment Corporation and switching networks have also been installed. In addition, the college has acquired a Computervision CAD/CAM system for use in several curricula.

3. What trends in the rapidly changing data processing field do you see as most critical to the future direction of this program? How is the college responding to these trends?

   Two of the most important trends in this field concern the proliferation of microcomputers in the work world and the need to link them into a usable whole. The existing Small Systems option in the program has been addressing this first development since its introduction in 1983. A Data Communications option and a Systems Analysis and Design option are under development to address the second important trend.

The college is developing new options in Data Administration and Systems Programming to address other needs and in response to new trends in data processing technology. The college is also developing and offering an extensive array of noncredit courses.

4. What factors account for the declining enrollment in this program?

Enrollment in the college's Computer Studies/Data Processing program has experienced a decline as have similar programs across the State and nation. Actually, the college program's decline is substantially less than the statewide average decline. Several factors have contributed to the decline. First, the tremendous increase in enrollment during the previous five years was partially the result of high unemployment in the Baltimore metropolitan area's traditional basic manufacturing industries. This enrollment "bubble" was generated by a perceived need for retraining on the part of workers displaced in these industries. As a "high-tech" discipline, data processing became very popular. However, as unemployment has decreased, the need for retraining has also decreased.

Another factor contributing to the decline in enrollments is competition. The presence of the recently transferred (from College Park) Information Systems Management Program at UMBC, a new program at Dundalk Community College, and the baccalaureate program at Villa Julie have all contributed to the decline in students.

Additionally, the needs of the community for individual courses in microcomputing applications that formerly were met by enrolling in this program are now being met by noncredit courses and by students taking only selected courses in this program. The college will enroll over 1,000 students in noncredit computer classes this year.

5. At what level does the college expect the enrollment to stabilize?

Figures indicate that Fall 1985 enrollments are approximately 3 percent below Fall 1984 enrollments in Computer Studies/Data Processing courses. This may indicate a leveling off in the decline. The college expects enrollment will stabilize at about 400 FTE annually and will increase in noncredit applications.

6. For graduates who secured full-time employment, list all of the occupational titles reported on the most recent follow-up survey.

The following job titles were included in the most recent follow-up study:

systems analyst
analyst programmer
applications programmer
microcomputer applications programmer
control clerk
lead operator
operations supervisor
computer operator

7. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

   The program coordinator is in frequent contact with members of the Baltimore area data processing community. Through informal contacts at professional society meetings, frequent meetings with adjunct faculty, and formal visits to employer installations, he maintains an extensive "network" of informational sources. Last Spring a series of visits was made to major employers in Baltimore (e.g., Equitable Bank, Maryland National Bank, Commercial Credit, Westinghouse) to inform the information systems managers of the recent and anticipated changes in the Computer Studies/Data Processing program. Currently another series of visits is being planned to many of these same employers and others to find out what else they need in the way of professional training. The Program Advisory Committee met formally in December 1983 when it reviewed the changes to the curriculum that it had approved in 1982. In addition, the program coordinator has frequent contact with individual committee members and consults with them on a variety of issues. Committee members have suggested revisions to the Small Systems option as well as a Systems Programming option. These will be developed and implemented as noted above. Of the seven current members of the advisory committee, three represent organizations that employ the college's graduates. Another member is the president of a major employment firm specializing in placing data processing personnel.

8. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

   At the risk of sounding self-serving, the college believes program quality is excellent. The growth of the program was over a longer time period than other programs and the enrollment decline has been much less severe than that experienced by others in the area. Many graduates of the college's programs hold prominent positions in the field. This is an indicator of solid acceptance by the public of the quality of the program. Top notch faculty, all with practical experience in business or government as data processing professionals, combined with the best equipment, have helped to create a program second to none in the State.

9. If you were asked to give one piece of advice to your community college colleagues throughout the State on data processing AA and certificate programs, what would that advice be?

   The simplest and most direct advice to anyone contemplating such programs is to hire excellent faculty and motivate them to create and refine program offerings that reflect the ever-changing nature of the business. This can be done not just by adequate salaries that reflect the value of these individuals but by providing a hardware and software environment that is state-of-the-art. Data processing professionals need constant challenges and require frequent updating in the field. An institution that provides such an environment should find success in offering data processing and computer information systems courses.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The college should review the recommendations made in the statewide evaluation of data processing programs and implement those recommendations it deems appropriate for its program.

The college has developed extensive contacts with data processing employers and appears to be making good use of the expertise of individual Program Advisory Committee members. Nevertheless, the college is encouraged to hold formal meetings of the full advisory committee on a more regular basis.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Catonsville Community College

PROGRAM TITLE: Mental Health Services

PROGRAM HEGIS NUMBER: 5216-01 LEVEL OF AWARD: AA

1. What factors account for the declining enrollment in this program?

The major factor accounting for declining enrollment is the changing nature of jobs in the field. The statewide movement to deinstitutionalize patients has led to fewer jobs in mental health agencies that formerly employed students from the program. Additionally, jobs in those agencies have been upgraded requiring bachelor's or graduate-level degree graduates. In addition, many students in this program were mature women returning to work. The college is no longer seeing a significant increase in this pool of students.

2. At what level does the college expect the enrollment to stabilize?

The college has experienced decline in headcount for the last five years, particularly among full-time students. The college expects enrollment to stabilize around 80 total students and expects to increase over the next three years to as many as 120 total students.

3. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

Contacts with employers in the field have primarily been with those agencies where students had field placement as a part of the practicum experience in the program. Until most recently, the majority of these were community mental health centers and private and public residential mental health facilities. These agencies reflected the clinical psychology orientation of the program.

In December 1985, the college convened a group of employers who reflected a broad representation of the mental health and human service field. Some of this group had experience with the program, others did not. This group suggested the college consider restructuring the program beyond its current emphasis on clinical training and broaden it to include such things as geriatric care, residential supervision, work with the developmentally disabled, and work in alcohol and drug abuse centers. Eight members of the advisory committee were from organizations that employ graduates of the program.

4. The number of respondents to the follow-up surveys is inadequate to draw a conclusion about the program. Submit additional information for at least fifteen students from surveys of entrants and/or graduates. The surveys can be done by mail or telephone. Present the results in a table comparable to the PDM student follow-up display; salary data are not required.

The college conducted a telephone survey of students and the responses were as follows:

	n	%
Full-time job, directly related	9	50
Full-time job, somewhat related	0	0
Full-time job, not related	1	6
Part-time job, related	1	6
Part-time job, not related	1	6
Transferred, not employed	6	32
Seeking work, not employed	0	0
Total	18	100
Transferred, regardless of employment	10	56
Achieved personal goal	18	100
Satisfied with program instruction	18	100

5. What factors account for a discipline cost per credit hour that is much higher than the discipline cost per credit hour statewide?

The only unique expense of this program is the faculty cost. The one teacher in the program is a full professor at top of rank and thus salary cost is higher than the college's average salary cost. There are no special equipment or facility expenses.

6. This program was identified for a qualitative evaluation several years ago. What actions were carried out by the college in response to that evaluation, and what was their effect on the program?

The name of the program was changed. In addition, the college expected to increase the scope of practicum placements to include nursing homes, senior centers, after care programs for discharged mental patients and residential homes for the retarded, all of which appeared to offer better possibilities of employment than the traditional mental health facilities. Many of these placements are now being used. However, course descriptions, the curriculum, and promotional material did not reflect these changes.

7. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

Program quality as judged by practicum agencies, employers of graduates, and students themselves continues to be quite high. Faculty also rate the program as excellent. In particular, the practicum experience is judged to be an outstanding aspect of the program.

8. What action(s) does the college plan to take to address the above issues?

In December 1985, the college convened a broad sample of experts from the field. Some of these experts were familiar with the program, but many represented employers who had no prior experience with it. Based on the recommendations of this panel, the college is considering:

a. Broadening the current clinical orientation of the program to more specifically include education for work in positions that are currently available in geriatric care, residential supervision, work with the developmentally disabled, and alcohol and drug abuse centers.

b. Undertaking a major curriculum revision that will involve face to face interaction with this broader segment of potential employers.

c. Exploring the possibility of evening, weekend, and on-site courses for employers.

d. Changing promotional material to reflect the new job opportunities in the field.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Catonsville Community College

PROGRAM TITLE: Civil Engineering Technology

PROGRAM HEGIS NUMBER: 5309-01 LEVEL OF AWARD: Certificate/AA

1. What factors account for the low number of awards in this program?

   This program has always been small and many students in the Civil Engineering Technology (CET) program take courses for reasons other than the pursuit of a degree or certificate. There are few entry-level jobs requiring this degree. Most of the students are employed full-time and attend the college on a part-time basis. Students pursuing an award generally take only one or two courses per semester, thus requiring four to seven years job to complete the fourteen technical courses in the curriculum, and during that period often students change their goal due to personal or professional reasons.

2. What does the college consider to be a minimum number of awards for a successful program?

   The curriculum is attracting students and benefits those who enroll. There will never be many graduates, and the college considers the program successful as long as it maintains enrollment. Courses in this program also support Construction Inspection, Surveying, and the Drafting and Design programs. There are only two courses unique to this program and they can be electives in the Drafting and Design curriculum.

3. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

   A Civil Engineering Technology Advisory Committee has not met formally for several years. No changes have been made to the technical component of the CET program since Fall 1983. The program coordinator does, however, discuss the program and its course offerings with representatives of industry and with adjunct faculty. Many of these people employ CET students.

4. Make a value judgment about the enrollment and quality of the program. Is enrollment struggling? Satisfactory? Healthy? Is program quality low? Satisfactory? Excellent?

The college has not had high enrollment goals for this program. The program consists of courses selected from various existing programs, such as Construction Management, Construction Inspection, Surveying, Architecture and Engineering, among others, and the quality of these courses remains excellent. The program enrollment is low but stable and continued to enroll students in 1985.

Considering that the program consists of courses primarily from other successful curricula, it proves to be a cost effective program. Enrollment is satisfactory and quality is excellent.

5. What action(s) does the college plan to take to address the above issues?

The college will set up an advisory meeting of representatives of the variety of employers who employ construction personnel, including students from all the college's construction related fields. That committee will be asked to assess the relevance of the Civil Engineering Technology program and its relation to the college's other programs.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Catonsville Community College

PROGRAM TITLE: Recreation, Parks, and Lesiure Studies

PROGRAM HEGIS NUMBER: 5506-01 LEVEL OF AWARD: Certificate/AA

1. What factors account for the declining enrollment in this program?

   Several factors account for the declining enrollment. The traditional job market for graduates has declined. Job opportunities and salaries for graduates are inaccurately perceived to be low and tied only to the traditional public recreation jobs.

   Several personnel changes over the past few years have led to a disruption in recruitment efforts. This program typically enrolled young full-time college students, and the decline in recent high school graduates also has had a negative impact on the potential pool of applicants for the program.

2. At what level does the college expect the enrollment to stabilize?

   Enrollment in the program has already stabilized at a level of fifty students. The college expects no further decline.

3. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

   The program coordinator has been in contact through the years with a variety of employers, some considered to be nontraditional employers in the recreation and leisure field: the traditional parks and recreation departments (city and county), State and county health and recreation agencies, and facilities, commercial health, recreation, and leisure businesses, travel agencies, and military recreation facilities.

   In addition, the coordinator is an active member of the Maryland Recreation Education Consortium (MaREC), which has been discussing ways of combating the statewide decline in recreation education programs.

   The advisory committee met twice in December. Curriculum review was discussed, but no specific recommendations were made other than to support what the coordinator was trying to do to promote the program and its various options. Four members of the advisory committee are employers.

In December 1985, the college convened a broad group of potential employers in the field that made several recommendations included in #7 below. Eight members of the special group that met in December are employers. This group was comprised of people familiar with the program and potential employers not familiar with the program.

4. The number of respondents to the follow-up surveys is inadequate to draw a conclusion about the program. Submit additional information for at least fifteen students from surveys of entrants and/or graduates. The surveys can be done by mail or telephone. Present the results in a table comparable to the PDM student follow-up display; salary data are not required.

   A survey has been sent to entrants and graduates; however, the college is still collecting these data and will report the findings to the SBCC as soon as at least fifteen responses are received.

5. This program was identified for a qualitative evaluation several years ago. What actions were carried out by the college in response to that evaluation, and what was their effect on the program?

   In response to the PDMS request of 1981, the college acted as follows:

   - Provided a job referral service.
   - Created a file on career and transfer possibilities.
   - Promoted the Commercial Recreation option (new in 1981)
   - Deleted the Park Management option.
   - Maintained contact with the advisory committee members and the CCC Recreation and Park Alumni Club.

   In spite of the actions mentioned above, the enrollment in the program has gradually declined.

6. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

   The college considers the program satisfactory.

7. What action(s) does the college plan to take to address the above issues?

   A recent survey of employment opportunities in the region showed a minimum of 325 job openings available to associate degree graduates of recreation programs with salaries ranging from $9,000 to $17,000. In December 1986, the college convened a broad group of employers from the field to audit the program and make suggestions for improvement. Based on that group's recommendations, the college is undertaking the following actions:

   a. The college has applied for statewide status which will allow the program to more readily serve the entire Baltimore metropolitan area.

b. The curriculum will undergo a thorough review with particular attention to the possibility that the program may be offering too many specialty areas and should specialize instead in recreation programming.

c. Major promotional efforts will need to be undertaken to counteract public misperceptions of the occupation.

d. The college will receive recruiting assistance from MaREC, which is undertaking a program aimed at visiting all high schools in the State to explain course opportunities.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The college is asked to forward graduate follow-up survey data (see #4 above) to the SBCC as soon as it is available.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Cecil Community College

PROGRAM TITLE: Arts and Sciences Transfer

PROGRAM HEGIS NUMBER: 4910-01 LEVEL OF AWARD: AA

1. What factors account for the low number of awards in this program?

   There have been very few graduates in the Arts and Sciences program during the last five years. In conversations with faculty members and members of the Student Services Division of the college, the same reason for this small enrollment and graduate rate was cited: The General Studies program gives students more flexibility in meeting the requirements of four-year institutions.

2. What does the college consider to be a minimum number of awards for a successful program?

   The college believes that a specific number of awards is not needed for a successful program. The college offers an Arts and Sciences curriculum with an Arts option and a Science option. These two curricula, especially the Science option, will meet only the needs of a limited number of students. The college does not have special courses for these programs. All of the courses in both the Arts and Science options are courses that are available to the general student population. Therefore, the program does not cause the college to incur any extra expense or effort. The college is able to provide this type of curriculum for those who so desire the courses needed in a particular transfer curriculum.

3. The number of respondents to the follow-up surveys is inadequate to draw a conclusion about the program. Submit additional information for at least fifteen students from surveys of entrants and/or graduates. The surveys can be done by mail or telephone. Present the results in a table comparable to the PDM student follow-up display; salary data are not required.

   In reviewing records, the college located only seven graduates since 1981 in the Arts and Sciences curriculum. Each of the seven graduates was sent a survey and cover letter. Only three replies were received, one letter was returned because of no forwarding address, and the other three graduates could not be contacted during follow-up phone calls. At this point, there is no way the college can provide the State with additional information on graduates in the Arts and Sciences curriculum.

4. This program was identified for a qualitative evaluation several years ago. What actions were carried out by the college in response to that evaluation, and what was their effect on the program?

In March 1980, the college prepared a report on the Arts and Sciences curriculum. In this report a number of recommendations were made in order to improve the Arts and Sciences curriculum and the General Studies curriculum. Specifically, it was recommended that the following be included in the General Studies curriculum:

a. EGL 101 and EGL 102
b. Speech
c. A minimum of 3 hours of philosophy, art, or music
d. A minimum of 9 hours of humanities

All of these recommendations were enacted. In addition, the General Studies curriculum has become stronger because of the following:

a. A decrease in general elective credits from 24 to 12
b. Nine credits in the humanities
c. The requirement that students take a physical and biological course, one of which must have a lab
d. The addition of data processing for non-majors

Recommendations for the Arts and Sciences curriculum were:

a. A two-semester sequence of literature
b. Three hours of philosophy and 3 hours in speech
c. A minimum of 3 hours from art, music, or drama
d. College algebra
e. A two-semester sequence (8 hours) of a laboratory science

Of the preceding recommendations, all but one (3 hours in art, music, or drama) was implemented. The college is now considering requiring 3 hours of art, music, or drama in the Arts option of the Arts and Sciences curriculum. It was also recommended that options within the Arts and Sciences program be revised and published in the college catalog, and this has been done.

The preceding recommendations have provided the college with two quality programs. The General Studies program, which at one time was rather weak and quite liberal in the area of general electives, has been strengthened and can now be thought of as an exceptional General Studies program. The Arts and Sciences curriculum, since its revision in 1981, provides an exceptional program for students who desire to take either the Arts or Science option.

The major differences between the General Studies program and the Arts and Sciences program, as they now exist, are as follows:

a. General electives
   - o General Studies - 12 hours
   - o Arts and Sciences Arts option - 3 hours
   - o Arts and Sciences Science option - 3-4 hours (biology and physics emphasis)
   - o Arts and Sciences Science option - 0 hours (chemistry emphasis)

b. Humanities
   - o General Studies - 9 hours
   - o Arts and Sciences - 3 hours

c. English
   - o General Studies - 9 hours
   - o Arts and Sciences - 12 hours

d. Mathematics
   - o General Studies - any math except 099, 100, or BUS 130
   - o Arts and Sciences Arts option - MAT 112
   - o Arts and Sciences Science option - MAT 112 (biology emphasis)
   - o Arts and Sciences Science option - MAT 201, 202 (chemistry and physics emphasis)

e. Science
   - o General Studies - a course from the biological sciences and a course from physical sciences - one of which must include a lab
   - o Arts and Sciences Art option - 8 hours of laboratory science that must be a two-semester sequence
   - o Arts and Sciences Science option - 31 hours (biology emphasis)
   - o Arts and Sciences Science option - 36 hours (chemistry emphasis)
   - o Arts and Sciences Science option - 32 hours (physics emphasis)

f. Speech
   - o General Studies - SPH 121 or SPH 141
   - o Arts and Sciences - only SPH 141

g. Social Science
   - o General Studies - 6 hours history, 3 hours psychology or sociology elective
   - o Arts and Sciences Art option - 6 hours history, 9 hours from economics, geography, psychology, sociology, or political science (from at least two areas)
   - o Arts and Sciences Science option - 6 hours history, 6 hours from economics, geography, psychology, sociology, or political science (from two areas)

5. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

Both the General Studies program and the Arts and Sciences program (both the Science and Arts options) are excellent programs and provide students with a quality transfer program. The college is especially proud of the revised General Studies program, which is one of the strongest in the State.

6. What action(s) does the college plan to take to address the above issues?

No major alterations are needed in these programs. In the preceding paragraphs a number of minimal changes to the Arts and Sciences program have been suggested. However, these changes will not influence the number of students that will enroll in the Arts and Sciences program. The Arts and Sciences program is available for those students who desire this type of program, and it does not cause the college any undue financial burden.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Cecil Community College

PROGRAM TITLE: Data Processing

PROGRAM HEGIS NUMBER: 5101-01 LEVEL OF AWARD: Certificate/AA

1. What steps are being taken to attract and retain qualified full-time faculty for this program?

   The retention and attraction of full-time faculty at Cecil Community College is an ongoing process. Advertising the merits of the program throughout the community, providing the faculty with state-of-the-art equipment, providing the faculty with the opportunity to assist in the development of a curriculum that meets the needs of the community, and maintaining high standards of instruction to produce well-trained graduates with employable skills are some of the steps taken to retain and attract full- and part-time faculty.

2. What success has the college had in keeping up with the high equipment costs associated with this progam? Describe the nature and scope of recent equipment acquisitions?

   High equipment costs are met through the budgeting process and grants. In the budgeting process, the department defrays per student costs by providing computer service for students not in the program. The college has recently acquired and installed a local area network (LAN) system and forty microcomputers and is in the process of acquiring a minicomputer with Title III funds.

3. What trends in the rapidly changing data processing field do you see as most critical to the future direction of this program? How is the college responding to these trends?

   One of the most important trends in the industry is the proliferation of the microcomputer and the many applications that are available to both computer and non-computer persons. Both types of people need training. They need to know how to effectively use these tools to more efficiently do their jobs and thus be more productive. The department has offered this type of training for the past two years. The college is continually striving to provide training using state-of-the-art equipment and applications. The college continually attempts to acquire new software and hardware as they become available.

4. What factors account for the declining enrollment in this program?

Declining enrollment may be due to a declining poulation base and the current state of the community's employment. There are jobs available and prospective students in the area fill them at the expense of education. Students prefer not to enroll as full-time data processing majors, but rather to complete the minimum number of courses that gives them the training necessary to maintain a current job or attain the skill levels needed for immediate employment. Prospective employers are desperate for people that can operate microcomputers and so will hire employees that have not completed a degree but have attained the skills needed. Cecil Community College is attempting to address these needs by offering a wide variety of courses that teach these special skills. The college will begin to offer new certificate programs in many of these areas.

5. At what level does the college expect the enrollment to stabilize?

The college expects to maintain the current level of full-time data processing enrollment. But as stated above, the actual class sizes will increase due to the addition of courses that train people to use microcomputers and the many applications available.

6. For graduates who secured full-time employment, list all of the occupational titles reported on the most recent follow-up survey.

Occupational titles for recent graduates are:

computer operator	programmer
programming supervisor	senior or junior programmer

7. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

The college is in constant contact with employers, prospective employers, and companies that need training for current employees. The curriculum is then adjusted to meet their needs. In these meetings the discussions usually cover topics like "where is the industry headed?" . . . "what type of courses would make prospective employees more qualified?". Currently, the advisory committee serves the entire Careers Division. The college hopes that a subgroup that serves data processing only will be formed by Summer of 1986. The present advisory committee meets seven or eight times a year.

8. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

   The Data Processing program is one of the best in the area. The program will be even better with the addition of the minicomputer that will be installed by Summer of 1986. The addition of new certificate programs that will enable a student to become trained in various areas of microcomputer operations and applications will also be helpful. Additionally, new courses in Data Communications and Computer Operations will greatly enhance the curriculum.

9. If you were asked to give one piece of advice to your community college colleagues throughout the State on data processing AA and certificate programs, what would that advice be?

   The Data Processing AA and certificate programs must include courses in Data Communications and Application Software. Also, an attempt must be made to offer a wider variety of certificate programs that meet the needs of the employees and employers.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The college should review the recommendations made in the statewide evaluation of data processing programs and implement those recommendations it deems appropriate for its program.

The college is encouraged to form a separate Program Advisory Committee for the Data Processing program.

The college is encouraged to develop and submit to the SBCC for approval additional certificate programs and/or options as needed.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Charles County Community College

PROGRAM TITLE: Office Technology

PROGRAM HEGIS NUMBER: 5005-01 LEVEL OF AWARD: Certificate/AA

1. What success has the college had in keeping up with the high equipment costs associated with this program? Describe the nature and scope of recent equipment acquisitions.

The Charles County Community College Office Technology program has been successful in keeping up with the high equipment costs by phasing in new equipment over a number of years and by sharing high-cost microcomputers with other departments.

There are three microcomputer labs available on the main campus for use by the Office Technology classes. In Fall 1981, twenty Apple II-Plus microcomputers were acquired; Morrow-design microcomputers and ten IBM personal computers were purchased in 1983 and 1984, respectively. In Fall 1984, ten more IBM personal computers were purchased for the new Smallwood Campus. Additionally, Hewlett-Packard micros are available at the St. Mary's Campus through a cooperative arrangement with the board of education and, in addition, ten IBM Pcs were purchased in 1985 for that satellite. TRS-80 and Apple IIE micros are available in Calvert County.

Printers are available at a ratio of two printers per ten computers in all labs. In the lab in which most word processing classes are taught, there are four Epson dot matrix printers and one daisy-wheel letter-quality printer. T-switches were purchased in 1985 which provide a small networking system for joining four computers to one printer.

The Office Technology program uses the above-mentioned labs for the following classes: Beginning and Advanced Word Processing, Word Processing Concepts for Managers, Microcomputer Managerial Spreadsheet Applications, and Computer Data Base Applications. The following software is run on the micros: Word Star, with Mail Merge and Dictionary Features, Lotus 1-2-3, and dBase III.

Electronic typewriters are used in the Office Technology program. The IBM 50, 60, 75, and 90 electronic typewriters were purchased in 1980-1981. In Fall 1985, two IBM wheelwriter 5s and two Xerox 620s were purchased. In the Summer of 1985, two additional Sanyo dictation/transcription units were purchased. An additional two Sanyo units were also purchased in Fall 1985. Canon calculators were purchased in 1982-1983.

A three-year budget and list of proposed expenditures were submitted in November 1985 for administrative consideration. The proposed budget included the following recommended expenditures:

20	Sanyo transcription/dictation units
1	laser printer
5	Xerox 620 memorywriters
5	IBM wheelwriter 5 electronic typewriters
10	Canon calculators
10	Kodak AV 620s
11	Miscellaneous software and textbooks for machine transcription, a self-paced typewriting program, office procedures, business machines, and computer graphics

Improved utilization of the Office Technology labs will be initiated in Fall 1986 with the initiation of open lab time to allow students both supervised and unsupervised lab practice time.

2. What trends in the rapidly changing office automation field do you see as most critical to the future direction of this program? How is the college responding to these trends?

The field of office automation is undoubtedly one of the most rapidly changing areas in the business education curriculum. A recent suvey appearing in Viewpoints in Business Education (Vol. 9, No. 5, February 1984) noted several important trends in the office automation field. A summary of these trends and the college's response to them is noted below:

- Sixty-four percent of the companies surveyed use 1-15 electronic memory typewriters. Charles County Community College has the following electronic typewriters in the Office Technology program: IBM 50, IBM 60, IBM 75, and the IBM 90 memorywriter. In addition, the college purchased two IBM wheelwriter 5s and two Xerox 620 memorywriters during the Fall semester 1985.

- Ninety-six percent of the companies surveyed use electronic calculators. OFT 105, Business Machines and Filing (3 credits), provides students with extensive training on the electronic calculator as well as a review of basic math skills. The use of the ten-key adding machine is also taught in OFT 105.

- Eighty-six percent of the companies surveyed use dictation/transcription equipment. Sixty percent of companies surveyed require secretaries to use machine transcription on the job. Units on how to use dictation/transcription equipment are integrated into both OFT 105, Business Machines and Filing, and OFT 107, Office Procedures (3 credits). Beginning Fall 1986, a one-semester course, Machine Transcription, will be incorporated into the program at CCCC.

- One hundred percent of the companies surveyed utilize records management systems involving paper; ninety-four percent store files on magnetic disks. Alphabetic, numeric, subject, and geographic filing practices are taught in the Business Machines and Filing course. A unit on alphabetic filing is included in Office Procedures.

- Fifty-six percent of companies surveyed require secretaries to take dictation in shorthand. OFT 103, Shorthand (3 credits), and OFT 104, Shorthand Review Dictation and Transcription (3 credits), present the fundamentals of Gregg Shorthand Series 90. The students acquire a thorough understanding of shorthand theory while developing skills in dictation and transcription. In OFT 104, students develop a minimum shorthand speed of 80 wpm for three minutes and transcribe with a minimum of 95 percent accuracy.

- One hundred percent of the companies surveyed use photocopy equipment. In OFT 105, Business Mahcines and Filing, students learn the latest in reprographics procedures through hands-on experience and through field trips to offices in the county.

- Eighty-two percent of the companies surveyed currently use word processing as a part of office operations; of those which do not currently have word processing, 67 percent report that they plan to incorporate it in the near future. In the Office Technology program, students may take OFT 220, Beginning Word Processing (4 credits), and OFT 221, Advanced Word Processing (3 credits). Students learn how to operate a microcomputer using word/information processing and learn to adapt these skills to a variety of equipment. Students also learn about electronic mail and filing, networking, calendars, modems, and micrographics. They examine computer applications, ethics, basic components, word processing software, and career opportunities. In the Word Processing program, students take CDP 110, Introduction to Microcomputers (3 credits), CDP 150, Introduction to Programming in the BASIC Language (3 credits), MIS 160, Microcomputer Managerial Spreadsheet Applications (1 credit), and MIS 170, Microcomputer Data Base Applications, as well as other related courses.

The study also identified skills, knowledges, and understandings required of entry-level employees in the clerical and secretarial fields. Clerical employees are required to have the following skills: typing/keyboarding, mathematics, language skills, pleasing personality, verbal communications skills, ability to operate an electronic calculator, accounting skills, ability to operate a ten-key keyboard, telephone skills, knowledge of office procedures, and the ability to work with machines. Secretarial employees are required to have the following skills for an entry-level position, in addition to the ones listed above: word processing, secretarial procedures, spelling, filing, and business writing skills.

At Charles County Community College, typing/keyboarding skills are taught in OFT 101, Beginning Typewriting (3 credits), and OFT 102, Intermediate Typewriting (3 credits). Advanced Typewriting is also available for interested students. Verbal and written language skills are emphasized in all Office Technology and Word Processing classes in the form of grammar, punctuation, and spelling review. In addition, all students are required to complete ENG 101, Composition and Rhetoric (3 credits), ENG 206, Business Writing (3 credits), and SPH 103, Business and Professional Speaking (3 credits). Telephoning skills are emphasized in OFT 107, Office Procedures.

In addition to the required courses, Office Technology and Word Processing students may select two elective courses, such as BAD 101, Business Organization; BAD 121, Principles of Management; and MTH 130, Mathematics of Business and Personal Finance. Students also have the options of taking elective classes in the areas of Accounting, Computer Data Processing, and Business Administration.

The survey also identified the expected progression of technology in the next five years. The expected trends include: (1) data entry terminals at most decision-maker workstations; (2) expanded information processing and electronic mail applications; (3) networking of word processing and data processing terminals for internal and external use; (4) expanded use of electronic mail; (5) memory keyboard equipment at all secretarial workstations; and (6) electronic keyboards at all executive workstations.

In summary, the college is responding very quickly to the changing trends in office automation. The Office Technology staff, with the guidance of the research specialist at the college, conducted a survey of all students currently enrolled in Office Technology/Word Processing courses. The results of the survey indicated a need for two new courses--Civil Service Review and Machine Transcription--which will include plans to offer these new courses as early as the Summer or Fall semester in 1986.

The Office Technology staff has met with representatives from IBM, Xerox, Hewlett-Packard, Wang, and Lanier to examine new equipment on the market. Based on these presentations, the staff recommended the purchase of IBM wheelwriters and Xerox 620s. The staff also purchased two additional Sanyo transcribers in Fall 1985. The staff met with book and software representatives from the leading educational publishers. Based on the review of the new texts, the Office Procedures book, as well as the filing practice set, was changed for the 1986 Spring semester. Additional hardware and software purchases will be requested as part of the 1986 budget.

The staff recently visited Catonsville Community College to view the college's modified "open-entry, open-exit" program in the area of Office Technology. Prince George's Community College, Anne Arundel Community College, and other colleges will be visited to view the way these schools are meeting the needs of the students. The staff at Charles County Community College is committed to meeting the needs of the students through the most efficient, well-planned environment possible. The staff will remain open to new ideas on course offerings and program management. The staff is currently evaluating the program of self-paced learning at Catonsville for possible adoption and/or modification at Charles.

3. What factors account for the declining enrollment in this program?

Enrollment in the Office Technology certificate program has fluctuated between 65 and 132 students over the past five years with 61 students currently seeking awards in the program. It should be noted that word processing courses were introduced in 1982 and the word processing certificate was introduced in 1983 (the year of the largest enrollment). Factors influencing the recent decline include:

a. The secondary schools have strong secretarial science programs which adequately prepare graduates for entry-level clerical positions.

b. An increasing percentage of students are part-time and may be forced to accept full-time employment after completion of the beginning skill courses.

c. Noncredit continuing education courses offered in short, concentrated formats are meeting the skill needs for many students.

It should be noted that enrollment in Office Technology courses continues at a high level, with 213 students enrolled in Fall 1985. A departmental survey indicated that many of these students have not yet designated a curriculum and are considering earning the Office Technology certificate.

An articulation agreement with the local high schools should help increase enrollment in the Office Technology program because students will be given credit for beginning levels of shorthand and typing. These students will then go on to the more advanced courses and will want to complete the certificate.

4. At what level does the college expect the enrollment to stabilize?

At the present time, enrollment has stabilized, for two years, at about 60 students. With innovations being added to courses and new courses being added to the department, the college expects enrollment to increase. With the purchase of additional electronic typewriters, calculators, and transcribers, and with a new marketing package designed by the Office Technology instructors, the college expects to attract and recruit additional students. It is hoped that within two years enrollment will stabilize at approximately 80 students.

5. What factors account for the declining awards in this program?

Total awards at Charles County Community College for the Office Technology and Word Processing certificates were as follows:

1979 - 13
1980 - 20
1981 - 7
1982 - 18
1983 - 28
1984 - 16
1985 - 15

Factors affecting declining awards are similar to those noted in the answer to question #3 above concerning declining enrollment. It should be noted that the increased number in 1983 was the same year the Word Processing certificate was initiated. The college has initiated articulation agreements with the secondary schools and hopes that students who enter with advanced standing will remain to complete the program. In addition, recent purchases of modern equipment and curricular revisions are intended to revitalize the program.

6. What factors account for the low placement of students in full-time jobs related to their field of training?

Although the 1985 SBCC Program Data Monitoring System shows only 40 percent of the respondents were employed full-time in a directly related field, new data obtained through a telephone survey of 1985 graduates indicate much better results. Fifteen students earned awards in the Spring of 1985. Twelve of these students were contacted by phone and of these only two were unemployed and they were not seeking employment. Of the ten students who were working full-time, nine (75 percent) were currently employed in a directly related field.

7. For graduates who secured full-time employment, list all of the occupational titles reported on the most recent follow-up survey.

In May 1985, fifteen individuals graduated with a degree or certificate in Office Technology. One graduate received an AA in Secretarial Science. Three graduates received certificates in Word Processing; ten graduates received a certificate in Office Technology/Secretarial Science. The Office Technology staff was able to contact twelve of the fifteen graduates by phone. Below is a list of the job titles of recent graduates:

executive assistant
store clerk
word processing specialist
administrative assistant III
special assistant (government administrative post)
legal secretary
secretary
data entry clerk

8. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

In Fall 1985, the Office Technology staff initiated the formation of a new and unique committee entitled, "Businesses and Business Educators--Preparing Students for the World of Work." One of the most unique aspects of the project was the coordination of efforts between the Office Technology staff and the business education teachers of the Charles County public schools. The project was initiated, in part, to enhance the efforts of the college to develop articulation between the college and the school systems.

Business leaders who were invited to the meeting included representatives from an architectural firm, a computer firm, an oil company, a bank, a newspaper, an insurance company, an electric co-op, a telephone company, an automobile dealer, a department store, and a cable television firm. Many of these representatives have employed Charles County Community College graduates.

The business representatives indicated the increased use of word processing equipment and microcomputer terminals in their offices. The representatives stated that the word processing software, WordStar, is considered to be the most commonly used software. Other software packages, such as dBase III and Lotus 1-2-3, are also used. It was interesting to note that the CCCC uses these software packages in the word processing and management information systems classes. The businessmen also addressed the impact the soon-to-be-developed regional mall will have on the job market. It is estimated that over 3,000 new jobs will be created in the next two years. Many of the office technology, word processing, and business classes will prepare the students for these jobs.

Representatives from this initial forum will be invited to join the newly formed Office Technology Advisory Council. This group, comprised of business representatives from all three counties, secondary school representatives, and graduates of the program, will convene early in Spring 1986 to review program evaluation data and curriculum.

9. What factors account for a satisfaction with preparation for employment that is below the State average?

One hundred ten students completed the Office Technology survey recently conducted by the Office Technology staff. An overwhelming 109 students reported that they were satisfied with the educational preparation they are currently receiving at this institution. The college is confident, therefore, that the majority of the graduates are satisfied with the education they are receiving at Charles County Community College.

10. Make a value judgment about the quality of the program. Is the program quality low? Satisfactory? Excellent?

The Office Technology faculty feels that the program is approaching excellence. The courses are designed to meet the needs of the students in the business world and give students an opportunity to develop a variety of skills. The college has responded to technological advances by incorporating word processing, microcomputer spreadsheet applications, and microcomputer data base applications into the curriculum. The college also offers the students the choice of earning an Office Technology certificate and/or a Word Processing certificate. Based on a survey of student interests and job market needs, two new courses will be added to the curriculum in Fall 1986--Civil Service Review and Machine Transcription. These new courses will further refine the skills of the students in the program. The course offerings are one reason for the high quality of the program as students receive not only content knowledge but also practical, hands-on experience on a variety of equipment.

The Office Technology full-time faculty members are the sponsors of Phi Beta Lambda (PBL), the business fraternity. In the past, Charles County Community College business students have placed in State competitions and have also received awards at the national PBL competitions. An extremely enthusiastic group of students is coordinating the activities of the club and qualified students plan to participate in this year's competitions. By bringing together business students of all disciplines, the organization allows students to socialize while sharing skills and knowledge. The organization provides an opportunity for students to apply what they have learned in their classes. Therefore, PBL adds a positive dimension to the business curriculum.

SBCC STAFF RECOMMENDATIONS/COMMENTS

In 1982, the college requested discontinuance of the Office Technology AA program. The request was approved at that time. Since then, the SBCC has not received a request from the college to again start the degree program. The college is asked to clarify its response to question #7 above wherein it is noted that one AA was awarded in Spring 1985. State approval is needed to reinstitute the AA program.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Charles County Community College

PROGRAM TITLE: Data Processing

PROGRAM HEGIS NUMBER: 5103-01 LEVEL OF AWARD: Certificate/AA

1. What steps are being taken to attract and retain qualified full-time faculty for this program?

   Recruitment of qualified full-time data processing faculty has been a continuing problem. For the past two years one vacancy has remained unfilled in the department despite frequent hiring efforts which have included classified advertising in local, regional, and national newspapers and the Chronicle of Higher Education as well as contact with nearby military bases for active or retired personnel.

   The faculty has identified the factors which, they believe, contribute to the college's difficulty in attracting faculty: (1) entry-level salaries in the $20s are not competitive in the marketplace; (2) current rank requirements restrict placement of new faculty at higher salary levels; and (3) the rural location of the college. Recognizing that this faculty recruitment problem exists in other occupational programs as well, the academic deans have requested that the Faculty Senate Executive Board study the existing rank and salary structure. A faculty committee has been convened that will make preliminary recommendations in May 1986 on alterations in the rank and salary structure which recognize the changing needs of the institution.

   The data processing faculty members have expressed a concern about their need to keep up with advancements in the industry. The college has allocated more funds for faculty development in this discipline so that, over the past two years, faculty members have taken courses in data base, local area networks, data communications, operating systems, and management of technology. The college believes that this investment in staff development will result in a more knowledgeable and productive faculty who are satisfied with their jobs. Faculty retention in recent years supports this belief.

2. What success has the college had in keeping up with the high equipment costs associated with this program? Describe the nature and scope of recent equipment acquisitions?

   Most of the recent equipment acquisitions have been for microcomputer equipment and software. The following table shows the major purchases:

Date purchased	No. of computers	Computers purchased	Campus location
1982	25	Apple II+	Charles County
1983	28	Morrow MD-2	Charles County
1983	17	TRS Model 3	St. Mary's County
1984	10	IBM-PC	Charles County
1985	10	IBM-XT	Smallwood Center
1985	10	IBM-XT	St. Mary's County
1985	10	IBM-XT	Smallwood Center

The software purchased with these machines include products such as Wordstar, Lotus 1-2-3, DB III, engineering graphics.

The college has been successful in keeping up with the high equipment costs by phasing in new equipment over a number of years, by sharing the high-cost microcomputers with other departments, and by establishing lab fees which reflect the high maintenance and material costs associated with these courses. In an effort to reduce software costs, faculty are reviewing textbooks which include software discs for use in class. Adoption of these texts would greatly reduce future software acquisitions but result in an increase of approximately $5.00 per text to the student. The relative benefits are under consideration.

3. What trends in the rapidly changing data processing field do you see as most critical to the future direction of this program? How is the college responding to these trends?

The single most important trend is probably the advent of larger, faster, less expensive microcomputers. This allows many more people, companies, and government agencies to purchase their own computer systems. This opens up a whole new group of clients who need training for themselves or for their employees to utilize these new computer systems.

The second trend parallels the first to some degree. Large mainframe computers are also getting larger, faster, and cheaper. The professionals needed to run these machines, such as programmers and analysts who use the machines, are also getting more expensive. These people need to become more productive through the use of higher level languages, such as fourth-generation languages and report and application generators. They also need to become skilled with data base and data communications products. Products, such as data bases which enhance the ability to utilize information, will become more important in most data processing centers. The ability to use data bases, particularly the newer relational data bases, will become much more critical to the graduates.

The trend toward distributed data processing, especially microcomputer networking, is significant. Students will have to know more about the elements of data communications as a result.

The college has responded to these trends by training faculty on these new topical areas and by offering courses in these areas. Data base and data communications are now required courses in the associate degree program.

The data processing faculty have proposed a new degree option in Microcomputers to supplement the Business Programming degree that is now offered. A new associate degree transfer program in Management Information Science also has been proposed. Both new programs are under consideration at this time.

4. What factors account for the declining enrollment in this program?

The decline in enrollment as reported in the 1985 PDM reflects a change in college policy on student designation of a curriculum rather than an actual decrease in students in the program. In 1983, the college initiated a process that allowed students not planning to complete a program to register as "non-degree seeking" or "undecided." This resulted in a large number of students in computer courses who did not declare themselves as majoring in the computer program.

The faculty is pleased with the increase in number of program graduates. Since 1982, there has been a 145 percent increase in AA graduates and a 73 percent increase in certificate graduates. These completion statistics indicate a successful program.

5. At what level does the college expect the enrollment to stabilize?

The population of Southern Maryland is still growing. If the college continues to provide the courses and programs that the citizens and employers want, it is believed that expansion is probable in computer course enrollments. Enrollments in these programs may stabilize at current levels.

6. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

The major contacts with local industry that hire computer graduates have been through the Program Advisory Committee. The membership is comprised of representatives of the two largest employers of computer professionals in the Southern Maryland area, as well as representatives of major employers in the Washington metropolitan area. The advisory committee met three times during 1985. Typically, the committee meets near the end of the Spring term to review the results of the year. Another meeting is held at the beginning of the Fall term to review enrollment and proposed course and program changes. The third meeting is held in the late Fall to present program, course, and catalog revisions.

The committee made many suggestions that were incorporated into the proposals made by the data processing faculty. They proposed the development of a transfer program in Management Information Science. They suggested maintaining the emphasis in business courses, especially accounting, and proposed more courses and a program in microcomputers. In addition, the committee emphasized the need to understand data and data base concepts and supported adding data communications as a required course because of its increased importance. Their advice and suggestions have been very beneficial and helpful to the faculty.

The organizations represented by the advisory committee have all hired one or more employees of the program. Two, the Naval Ordnance Station in Charles County and the Patuxent Naval Air Station in St. Mary's County, have hired many graduates over the years.

7. What factors account for a discipline cost per credit hour that is rising much faster than the discipline cost per credit hour statewide?

The increase in discipline cost is attributed to the addition of full-time faculty positions and the high cost of equipping, maintaining, and operating the computer laboratories. In addition, it should be noted that the cost for all disciplines at the college has increased more rapidly than similar statewide costs and is higher than data processing discipline costs. It is suspected that this change is, at least in part, attributable to new accounting procedures.

8. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

The faculty believes the quality of the Data Processing program should be rated as good to excellent. Follow-up studies indicate that graduates exceed statewide averages when considering such indicators as satisfaction with the program, satisfaction with employment preparation, and obtainment of full-time jobs directly related to the instructional program. Substantial increases in the number of graduates in recent years is another positive indicator of a successful program. Course changes planned for next year will further strengthen the curriculum and keep it technologically current.

9. If you were asked to give one piece of advice to your community college colleagues throughout the State on data processing AA and certificate programs, what would that advice be?

Have an advisory board made up of data processing professionals from major computer installations in your area of employment and listen to what they have to say about the hardware and software environment in which your students will work. Look closely at the trend toward microcomputers in the workplace and provide programs suited to meet the growing needs in this area.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The college should review the recommendations made in the statewide evaluation of data processing programs and implement those recommendations it deems appropriate for its program.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Charles County Community College

PROGRAM TITLE: Licensed Practical Nursing

PROGRAM HEGIS NUMBER: 5209-01 LEVEL OF AWARD: Certificate

1. What factors account for the declining enrollment in this program?

There has been a marked decrease in positions for LPNs across the nation, with Maryland being no exception. A survey of five acute care facilities in Southern Maryland reveals that all employ 3-15 percent LPNs on their staffs. There are limited openings for LPNs in these acute care facilities, and LPNs presently employed are encouraged to return to school and get their Registered Nursing degree. Nursing homes in the area continue to hire LPNs.

Prospective students are aware of the job market and the largest percentage of them opt for the ADN program. Some enroll in the LPN program with the intent of going on to the ADN program as soon as possible. To date, 47 percent of all graduated IPNs have gone on to the ADN program.

2. At what level does the college expect the enrollment to stabilize?

Enrollment has continued to drop each year as the job market tightens for the LPN.

There is one other LPN program in the Tri-County Area--St. Mary's Vo-Tech High School. The program is closing this year; Charles County Community College will thus be the only LPN program in the area. There are eight nursing homes in the area that hire five to six LPNs per year on either a full- or part-time basis.

Enrollment for the last two years has been about fifteen with a 20 percent attrition rate, yielding twelve graduates. The college feels enrollment will stabilize at about 10-12 graduates per year. These graduates will find employment in nursing homes.

3. What factors account for the declining awards in this program?

The number of awards increased dramatically in 1982 and 1983 as the Calvert satellite program opened, and then declined and evened out as the job market tightened.

4. At what level does the college expect the awards to stabilize?

Enrollments and awards are expected to stabilize at about the level reached in 1984 and 1985. With the closing of the St. Mary's vo-tech program, the college feels enrollment will increase from St. Mary's County. Some students will continue to enroll in the LP program using it as a stepping stone to the ADN program; and nusring homes will continue to advertise positions. It is realistic at present to expect enrollments of 12 to 15 students with about 12 awards per year. Since the certificate and AA Nursing curricula at Charles are offered in a "one place only" arrangement, LPN and ADN students are in class together which is more cost effective.

5. The number of respondents to the follow-up surveys is inadequate to draw a conclusion about the program. Submit additional information for at least fifteen students from surveys of entrants and/or graduates. The surveys can be done by mail or telephone. Present the results in a table comparable to the PDM student follow-up display; salary data are not required.

	1982		1983		1984		1985	
Number of graduates	13		19		12		12	
	n	%	n	%	n	%	n	%
Full-time job, nursing	8	80	14	74	5	45	5	45
Full-time job, somewhat related	0	0	0	0	1	9	0	0
Full-time job, not related	0	0	1	5	1	9	0	0
Part-time job, nursing	2	20	1	5	1	9	4	36
RN student, working part-time	0	0	2	10	1	9	1	9
RN student, not working	0	0	1	5	2	18	2	18
Total	10	100	19	100	11	100	12	100
Achieved personal goal	10	100	18	94	10	91	12	100
Satisfied with instruction	10	100	19	100	11	100	12	100

6. This program was identified for a qualitative evaluation several years ago. What actions were carried our by the college in response to that evaluation, and what was their effect on the program?

In January of 1983, a response to a request for qualitative assessment of the program was submitted. At that time, it was found that the reporting of August graduates was not included in yearly graduate data and corrections were submitted.

High attrition was attributed to the CETA eligibility requirements. Admission criteria for ADN and LPN programs are the same now and strictly adhered to.

Action was taken at that time to ensure that enrollments and awards were more accurately reported to facilitate the work of the Community College Program Evaluation System.

7. What major issues and concerns have been identified in preparation for the National League of Nursing reaccreditation visit? How will the college be responding to these concerns?

   Major issues that have been identified in preparation for the National League for Nursing accreditation visit is the future of practical nursing, scope of practice necessary in service arena, and mobility for practical nurses. Possible curriculum changes to highlight gerontological nursing are being considered since this is a prime area of responsibility for the licensed practical nurse.

   The college is responding to these issues by keeping in close contact with the health care community via surveys and advisory board participation. The college will continue to offer a Licensed Practical Nursing program as long as the community utilizes licensed practical nurses. The college will provide mobility for licensed practical nurses in the most effective manner possible.

   Since its inception, the LPN program at Charles County Community College has graduated 168 students. Of that number, only four have failed the licensing examination. Approximately 47 percent of the LPN graduates have gone on to the ADN program and have successfully completed it.

8. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

   The first two semesters of the LPN program are the same as the first two semesters of the ADN program. Administration and faculty thus feel the quality of the LPN program is excellent and provides wide opportunity for completion of student goals whether that means receiving an LPN or going to the Registered Nursing program. The program enjoys a fine reputation with area health care facilities.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Chesapeake College

PROGRAM TITLE: Business Administration Transfer

PROGRAM HEGIS NUMBER: 4970-01 LEVEL OF AWARD: AA

1. What factors account for the declining enrollment in this program?

A recent sampling of graduates showed this program disproportionately appealed to younger students, mostly those in the age group commonly associated with full-time students. This made the program particularly vulnerable to the declining share of full-time students at the college. In absolute numbers, full-time students dropped between 1983 and 1985, the short term for gauging the current picture of enrollments. In relative terms, full-time students slipped from a quarter to just about a fifth. While overall enrollments stayed nearly constant, only growth in part-time students occurred. Because enrollment in this program modestly correlated with full-time student status, fewer full-time students reduced yearly totals. A measure of this sensitivity occurred in Fall, 1985. As full-time students moved up slightly, Business Transfer majors registered a gain. Until the relative position of full-time students changes again--a scenario scheduled no earlier than two to three years from now--enrollment should not go up.

Shifting student interests also affected enrollment in this program. The following table illustrates changing choices. Principally, transfer programs decreased as occupationally oriented degrees and certificates received more candidates.

Shares of Transfer AA, Occupational AA and Certificates
in Business Curricula

Year	Transfer	Occupational	Certificates
1981	44%	30%	26%
1982	53	34	13
1983	49	23	28
1984	56	31	13
1985	32	37	32

A final consideration is differentiation introduced into the Business curricula. Recently a Business Management certificate was introduced. This strengthened choice, especially for older adults who are currently working.

2. At what level does the college expect the enrollment to stabilize?

The college's best predictor for this program would be about 100 students, plus or minus 10 percent. On the average, this is the expectation. However, it should be noted that during the last seven years, this program has had off years. In two of the last seven, it had Fall enrollments below these targets (see table below).

Total Business Transfer Enrollment By Years

Year	1979	1980	1981	1982	1983	1984	1985
Number	103	62	120	134	112	76	103

While the attractiveness of business has a long track record overall, the transfer program can expect steady-state or lower applicants, unless full-time students rose again.

3. The numbers of respondents to the follow-up surveys is inadequate to draw a conclusion about the program. Submit additional information for at least 15 students from surveys of entrants and/or graduates. Present the results in a table comparable to the PDM students follow up display.

A few anomalies of the original SBCC survey require attention. Only ten graduates left in 1982, the year for the survey. The response captured eight of them which was higher than the statewide response rate of 62 percent. In short, a minimum sample size of fifteen was not possible for graduates of that year since fewer than fifteen were available. The results obtained were representative and adequate for that year.

To supplement the graduate survey, a survey of entrants who were ending their programs was conducted. Fourteen students responded. The results appear below.

Entrants Who Expect to Finish Transfer Program in 1985-86

Number of Respondents	14
Relationship of community college program to Transfer program	
Directly Related	14%
Somewhat Related	29%
No Answers	57%
Satisfaction With Transfer Preparation	
Extremely Satisfied	0%
Satisfied	21%
No Answers	79%

Entrants Who Expect to Finish Transfer Program in 1985-86

Achieved Personal Goal	
Yes	79%
Satisfaction With Instruction in the Program	
Extremely Satisfied	57%
Satisfied	43%

4. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

Academic leadership at the college points to graduates who have done well at the University of Baltimore, the primary four-year school for transfers. Some have returned to teach at the college after getting their business training.

Most graduates who were contacted had finished a baccalaureate program in business. Although some felt shock after the transition to a four-year institution in their field, especially about the difficulty and changing requirements of academic performances, none expressed disappointment or regrets.

5. What actions does the college plan to take to address the above issues?

The curriculum committee of the college recently committed itself to closely tying program goals with corresponding behavioral objectives. This reaffirmation of existing policy should assist any required changes by seeking closer interactions between program intent and teaching practices.

The Dean of Academic Services also strongly supports the conclusion that the program is a good one. He insists on making sure the four-year institutions get a student in junior standing. He regularly asks coordinators of all transfer programs to review offerings and to make sure transfer institutions will not turn down our credits. The senior faculty leadership also insists that program monitoring has assured continuity and maintenance of existing quality.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Chesapeake College

PROGRAM TITLE: Computer/Data Processing

PROGRAM HEGIS NUMBER: 5103-01 LEVEL OF AWARD: Certificate/AA

1. What steps are being taken to attract and retain qualified full-time faculty for this program?

The college invests heavily in acquiring and keeping qualified faculty. Recruitment resulted in a new senior faculty member for the program. This individual has vast experience in micro-computing applications as well as mainframe processing, and carries extensive background in programming languages, operations research and large-scale data processing with statistics. He has assisted in the recruitment and selection of two new junior faculty. Both have had exposure to newer developments in micro-computing and business applications. Because of their recent training, a division of labor was set up. One handles business processing demands and specializes in one computer domain; the other manages higher-order, structured language and one computer specialization. All of these changes have occurred over the last two years.

2. What success has the college had in keeping up with the high equipment costs associated with this program? Describe the nature and scope of recent equipment acquisitions?

The college has built microcomputer laboratories stocked with Apple IIes, IBM-PCs and Macintoshes. In addition, a Corvus network allows easy access to instructional languages through any micro-computer connected to the network. The Corvus hard-disks network was a one-time purchase. Systematic annual acquisitions have added more interactive and stand-alone computing, and at the same time controlled costs.

Fortunately, continuous purchases during declining prices for computing dropped the net investment cost of expanding and upgrading the college's computer facilities. Failure to invest in a big mainframe, a one-time investment with large initial outlays and continued large upkeep costs, reduced the final investment size to manageable proportions of annual purchases.

3. What trends in the rapidly changing data processing field do you see as most critical to the future direction of this program? How is the college responding to these trends?

Micro-computing capabilities have increased greatly. This has enhanced the viability and market share for small firms, the largest users in the college's service area. The college's programs have easily absorbed the strengthened position of micro-computing in Business Data Processing. Changes toward integrated administrative software (the LOTUS 1-2-3 success story) and improved big data bases (the DBASE III story), with already anchored large commercial clients, are immediately met by current programs.

The college concentrates on providing continuity to established programming languages and better versions of existing programming languages. This insures, for example, better focus on structure programming in COBOL and PASCAL partly by following trends toward structured programming and partly by having updated processors for these languages. The College has also kept prior exemplars of topics (e.g., DBASE II for database) and made available improved exemplars (e.g., DBASE III) to current students or returning, continuing education clients. As the staff gains greater command over these changes, they are introduced into special topics courses or current upper-level courses. The college currently invests in keeping up with changes in improved processing and providing integration and exchanges in strengthened and expanded micro-computing for Business Data Processing.

4. What factors account for the declining enrollment in this program?

As a new program in Fall 1982, Computer/data Processing increased significantly. However, the service population, the recruiting ground for eventual degree or certificate candidates, has now bottomed-out to where it is expected to be for the next few years. At the same time, separating computer repairs from computer studies and properly tying it to the Electronics curricula contributed to the modest drop in enrollment in Computer Studies.

An interesting demographic situation occurred in this program. Throughout the college, the fastest growing group was part-time students during the years the program took hold. But this program experienced greater participation rates from full-time students, who moved from a quarter to two-fifths of the registered enrollment over the last three academic years. This group is not projected as a major source of future growth over the next three years.

5. At what level does the college expect the enrollment to stabilize?

The best picture of enrollments is a range between 300 (minimum) and 360 (maximum), with an average expectation of 330. This is the total number of students expected to enroll in Data Processing courses; about one third of these (100 to 120) will be Data Processing majors.

6. For graduates who secured full-time employment, list all of the occupational titles reported on the most recent follow-up survey.

computer assistant
bookkeeping assistant
assistant instructor of computer studies
accounting assistant

7. Describe the contacts that you have had with employers about the curriculum and the need for the program. How often has the program advisory committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the program advisory committee are from organizations that employ graduates of the program?

Employers typically call and indicate a need for some courses or for personnel. In the past year, local firms recruiting outside the college service area called and showed interest in graduates when openings occurred. Over the last two years, local firms made inquiries about offerings intermittently. From time to time, these firms call and consult on their needs or problems with programming packages. Informal consultations on software occur often. Additionally, the cooperative program placements provide direct contact with firms providing jobs and evaluating students. Since the advisory group for the program consists of local business people, their contact with the program provides another vehicle to hear and entertain concerns of local firms.

The program advisory committee met twice last year. They have made no substantial recommendations for changes. However, they have asked for more telecommunications. They also want more specialized courses, e.g., spreadsheets.

The advisory committee consists of members from local firms. Because of their strategic position in middle or upper management, they could easily hire any of our students.

8. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

Recent graduates have expressed satisfaction. Because the graduating classes are small, the sampling was small but representative. At best, this sampling suggests strong indicators, but not necessarily definitive consensus. Within the context of clients' responses to their program, the overwhelming evidence suggests Computer/Data Processing is a quality program.

9. If you were asked to give one piece of advice to your community college colleagues throughout the State on data processing AA and certificate programs, what would that advice be?

Chesapeake has noted some interesting trade-offs between mainframe training and a microcomputing network approach (the Chesapeake approach). The network investment provides shared instructional programs and processors and allows students unlimited, uninterruped micro-computer time for practice and reinforcement. Time-sharing constraints are eliminated with accompanying strong savings in instructional equipment outlays. As microcomputing expands, more local employees will rely on community colleges for training.

Without stretching the limits of microcomputing too far or ignoring the interactions of distributed computing demands, Chesapeake's approach may offer small colleges a competitive option to meet language training, practical business management data training, and basic programming skill acquisitions through alternative quality options for small colleges with strong fiscal constraints.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The college should review the recommendations made in the statewide evaluation of data processing programs and implement those recommendations it deems appropriate for its program.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Dundalk Community College

PROGRAM TITLE: Computer Programming Technology

PROGRAM HEGIS NUMBER: 5103-01 LEVEL OF AWARD: Certificate/AA

1. What steps are being taken to attract and retain full-time faculty for this program?

   The program has a new director who, in addition to four years of full-time teaching experience at the community college level, has an extensive background in the data processing industry. With his contacts in data processing and knowledge of the industry, it is felt that the college will be able to attract highly qualified full-time faculty as needed. Because of new equipment and enriched teaching resources, there has been no problem retaining qualified instructors. The only problem the college has in attracting instructors is due to the discrepancies in salary between industry and education.

2. What success has the college had in keeping up with the high equipment costs associated with this program? Describe the nature and scope of recent equipment acquisitions.

   The college has had reasonable success in keeping up with the high equipment cost associated with the program to date. The rapidly changing microcomputer field, however, is still presenting a challenge of a financial nature. The college recently acquired an AT&T 3B2 processor and AT&T 6300 and 7300 microcomputers. This equipment was purchased with vocational-technical education funds. Furthermore, an IBM 4331 mainframe computer and nine additional student terminals have also been acquired. This equipment was purchased with Baltimore County government funds. The current PCs are older systems but serviceable for teaching the BASIC language.

   Therefore, the budget need not be increased to enable the college to teach in the emerging standard personal computer environment, i.e., IBM PC and compatibles.

3. What trends in the rapidly changing data processing field do you see as most critical to the future direction of this program? How is the college responding to these trends?

   The college is responding to the current trends in microcomputers, on-line systems, and distributive data processing in its current curriculum. In addition, a long-range plan is being forumulated for additional enhancement in these areas of the curriculum. The Dundalk Microcomputer Programming certificate option to the Computer Programming Technology program was approved last year by the SBCC.

In addition, an anticipated need for more intensive education using microcomputers exists and the college is planning to establish an Information Services Technology program, add UNIX operating systems courses and a course in data bases. The college feels these additions to the program will take well into the future.

4. What factors account for the declining enrollment in this program?

It should be noted that Dundalk has the lowest decline in enrollment (1984 compared to 1983) of the sixteen colleges that had a decline. It is felt that the program has plateaued and will remain at its present enrollment, give or take 10 percent. Since 1982, many students enrolled in these courses only to find they lacked the appropriate skills. Two other factors account for declining enrollment. First, the economy has dramatically improved in the past two to three years and fewer people are seeking retraining. Secondly, the peak enrollments were probably influenced by "media blitz" and unprecedented general interest in computers that existed in 1982-1984.

5. At what level does the college expect the enrollment to stabilize?

The college expects the two factors, which are aforementioned in #4, to have no further effect upon the size of the enrollment in the program. The college feels that the program has stabilized at approximately 300 students.

6. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

Since the program director joined the college in August of 1985, he has had little opportunity to make contact with employers.

The advisory committee met once in 1985 to finalize the curriculum and hardware needs for the new Microcomputer option. The committee will meet at least once prior to June 30, 1986. Three members of the advisory committee are in a position to hire graduates. Eight people teach (six part-time) in the Computer Programming program and five are employers and/or owners of a data processing business. The college is planning to implement a "field project" to further strengthen the contacts with employers.

7. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

The quality of the program is truly excellent. The part-time faculty have been with the college for many years. They have volunteered hundreds of hours to assist the college with curriculum revisions, tutoring sessions, among others. Both of the full-time personnel have an excellent combination of data processing, professional experience, and college teaching experience. All of the courses have been revised within the last three years.

Student evaluations of the courses, instructors, and method of instruction clearly indicate the highest level of satisfaction. Mreover, several professionals in the field have validated the high quality of the program.

8. If you were asked to give one piece of advice to your community college colleagues throughout the State on data processing AA and certificate programs, what would that advice be?

There should be more emphasis on the students' understanding of data, its organization, format, and the coding systems in which it can be expressed. In addition, do not lose track of the foundation of logic and the principles of data processing which students must learn, regardless of the progress of advanced technology and the attractive "bells and whistles" that accompany it.

Two other issues are also worthy of note. First, more use should be made of cooperative education in order to give students real world experience. Second, colleges should incorporate assessment of prior learning into their programs.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The college should review the recommendations made in the statewide evaluation of data processing programs and implement those recommendations it deems appropriate for its program.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Dundalk Community College

PROGRAM TITLE: Retail Floristry

PROGRAM HEGIS NUMBER: 5402-02 LEVEL OF AWARD: Certificate

1. What factors account for the declining enrollment in this program?

The enrollment was stable at approximately 70 students for 1981 and 1982 and then increased in 1983. Hence, when it returned to a stable level of 71 in 1984, it reflected a 10 decrease over the previous years. The enrollment pattern suggests a shift towards fewer full-time students and more part-time students, a pattern which is consistent with campuswide trends. In part, the enrollment shift for 1984 can be attributed to an increased awareness on the part of the general public concerning high technology career opportunities (e.g., computer programing technology electronics, office automation systems, among others). The college's view is that this decline reflects the minor fluctuations to be expected in the various career programs.

2. At what level does the college expect the enrollment to stabilize?

The program and facilities are designed to accommodate a maximum of 80 students (40 day and 40 evening). The college expects the enrollment to stabilize at approximately 70 students.

3. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

As part of the college's review process, the Retail Floristry curriculum was selected for a comprehensive program review during the 1984-85 academic year using guidelines and procedures developed internally. An integral part of this process was the appointment of employers of graduates to the review committee. In addition, during the year a high level of informal contact with employers was maintained through the internship program as well as a continuing education floral course held on campus. All indications are that there exists a definite need for the program in order to supply skilled technicians to the floral industry.

The Program Advisory Committee met once during the past year to review the results of the comprehensive review process which included a Developing A Curriculum (DACUM) chart. The advisory board concurred with the revisions suggested by the review process. They are as follows:

- o FLO 101 (Introduction to Retail Floristry) be revised to emphasize more of the specific business aspects of the floral industry.
- o FLO 105 (Floral Design I) and FLO 106 (Floral Design II) be revised to teach more in the area of dried and silk flowers. More emphasis will also be placed on funeral arrangements.
- o HOR 103 (Plant Culture and Treatment) be revised to demonstrate more of the practical considerations of plants as opposed to the botanical approach.
- o FLO 212 (Floristry Internship) be revised to include time-motion analysis at the intern site in order to stress productivity.
- o RTA 101 (Retailing) and RTA 102 (Personal Selling) be revised to include more aspects of personal selling, business communication, customer relations, and business machines.

The net effect of these changes will be to fully incorporate all the competencies identified by the DACUM process.

Five of the eight advisory board members are from organizations that employ graduates of the program.

4. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

The quality of the program is judged to be satisfactory based on student evaluations, classroom observations, graduate follow-up studies, and the comprehensive program review.

5. What action(s) does the college plan to take to address the above issues?

The specific actions the college intends to take are as follows:

a. Implement the changes and revisions recommended by the review committee.

b. Investigate the creative use of advertising monies to fund activities, such as floral shows, that will highlight the program and contribute to the enrollment.

c. Continue to monitor the quality of the program through the use of college mechanisms already in place.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Dundalk Community College

PROGRAM TITLE: Labor Studies

PROGRAM HEGIS NUMBER: 5599-04 LEVEL OF AWARD: Certificate/AA

1. What factors account for the declining enrollment in this program?

There appear to be three main factors that account for the enrollment decline reported for 1979 through 1984. First, the program was designed to serve the needs of elected labor union officials and has been in operation since 1973. A large number of such persons in the service area have graduated from the program, and the relatively low rate of turnover of elected union officials thus partially accounts for an enrollment decline. Secondly, a significant decline in the financial resources of local unions in southeastern Baltimore County has occurred in recent years. Whereas many local unions previously paid the expenses of members taking Labor Studies courses at Dundalk Community College, due to financial difficulties none is providing tuition for officers or members currently. A third and related factor is that industrial unions are suffering a greater decline than others, and most students in the Labor Studies program in the past have come from industrial unions. In recent years, the college has increased enrollment from trade unions and "white collar" unions, but the turnover of leadership in these two groups is less than that in industrial employee associations.

2. At what level does the college expect the enrollment to stabilize?

It is difficult to identify an expected, stabilized enrollment level since so many variables affect enrollment in this program. Enrollment figures since Fall 1984 (the last term for which enrollment is reported on the PDM) indicate a dramatic increase: 32 in Fall 1984; 47 in Spring 1985; 70 in Fall 1985. But this is partly due to certain special programs being offered during this period. It seems reasonable to conclude that the Fall 1984 enrollment of 32 represents a "bottoming-out" however and that stabilization, should it occur, will be at a level slightly above this.

3. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

The director of the program has worked closely and extensively with local unions to identify needs and to establish both credit programs and noncredit courses to meet them. It should be noted that the results of many of these contacts are educational offerings, the enrollments for which are not reflected in the figures for the Labor Studies curriculum since they are noncredit, short-term, or highly specialized.

The Labor Advisory Committee has met monthly over the past year (and for many years preceding) and holds additional, special meetings as needed. The interests and outlook of this committee encompass more than just the Labor Studies curriculum which, while forming the core and focus of labor education at the college, is not the only avenue. For example, two specialized courses in blueprint reading for ironworkers are offered outside the curriculum and through another division of the college; and a recently developed apprenticeship program for longshoremen checkers will enroll students in noncredit continuing education courses.

The most significant change endorsed by the advisory committee is to add a Community Organization option within the Labor Studies program, or perhaps to subsume the Labor Studies curriculum beneath the larger umbrella of Community Organization. This change, currently being actively investigated, is in response to the recognition that many of the skills needed by labor leaders are the same as those needed by the leaders of various community organizations. Thus altered, the program would reach a wider audience and serve a broader range of educational needs within the community. Regarding possible changes or revisions within the existing Labor Studies program, it should be noted that an intensive review of competencies has recently been completed (using the Developing A Curriculum, DACUM, process) which may affect course structuring. The data from this review are currently being analyzed by the Program Director and the Social Science Division of the college.

The Labor Advisory Committee membership represents many and various labor organizations, but it must be remembered that labor leaders are elected rather than hired.

4. The number of respondents to the follow-up surveys is inadequate to draw a conclusion about the program. Submit additional information for at least fifteen students from surveys of entrants and/or graduates. The surveys can be done by mail or telephone. Present the results in a table comparable to the PDM student follow-up display; salary data are not required.

The relatively low rate of student response to follow-up surveys is accounted for by the fact that the survey data are largely irrelevant with respect to this program. The focus of the training is to enhance the student's ability to perform the functions of leadership in a labor union, which is by election and is not normally part of the student's job, but is in addition to and outside of his regular employment in a a trade or industry. The primary indicator of student satisfaction is the response to course evaluations conducted within the college. Responses to this questionnaire are consistently and highly positive.

5. What factors account for a discipline cost per credit hour that is much higher than the discipline cost per credit hour statewide?

The higher discipline cost per credit hour for this discipline (as compared to the discipline cost per credit hour statewide) reported by the PDM is accounted for by smaller class sizes. The program uses no special equipment, requires no unusual facilities, and makes frequent use of part-time, low-cost instructors.

6. This program was identified for a qualitative evaluation several years ago. What actions were carried out by the college in response to that evaluation, and what was their effect on the program?

The main result of the qualitative evaluation of this program done several years ago was in the area of course content. It was recognized that courses that deal with dynamically changing subjects, such as labor law (reflecting new court and NLRB decisions), need continued updating. The content of such courses is continually updated and special information seminars have been conducted on a timely basis.

7. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

The overall quality of this program is at least satisfactory. One of its notable strengths is the use of qualified experts to teach specialized courses. For example, a labor lawyer teachers labor law, a safety engineer teaches the safety courses, and an industrial physician teaches the course on occupational disease.

In view of the factors cited above, particularly in question #1, the main need is to make the same training available to a wider spectrum of persons in need of these skills.

8. What action(s) does the college plan to take to address the above issues?

The primary college response to the above issues is to pursue the Community Organization addition to the curriculum. Additionally, the college is investigating the advisability of curriculum revisions on the basis of the results of the DACUM review process and the development of a scholarship committee to raise funds for unemployed workers.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Essex Community College

PROGRAM TITLE: Data Processing

PROGRAM HEGIS NUMBER: 5103-01 LEVEL OF AWARD: Certificate/AA

1. What steps are being taken to attract and retain qualified full-time faculty for this program?

The college has been fortunate in its ability to attract highly qualified, dedicated faculty to teach in the program. All of the full-time faculty have taken IBM's Computer Systems Training course, an in-depth intensive training course required of all IBM Systems Engineers. All have a minimum of five years of industry-related experience and all have been involved in industry projects using state-of-the-art equipment. Each of the full-time faculty members has specialized in one aspect of the data processing field, e.g., programming (including COBOL, RPG, FORTRAN, BASIC, and ASSEMBLER), microcomputer applications, computer room operations. Part-time faculty members with expertise in business systems and design and communications complement the full-time staff. Thus, students receive broad-based training and are exposed to every major facet of the data processing field.

The college has attempted to provide opportunities for Data Processing faculty to enhance their professional development through its Summer institutional grant program. Faculty members have been awarded grants to work on curriculum development and revitalization. The college also provides tuition reimbursement for faculty members who wish to continue their graduate study in the data processing field. Additionally, most data processing faculty have received some federal grant funds for professional development activities under the recently expired 1976 vocational education act. Since the new federal vocational education legislation does not provide funds for faculty to upgrade their skills, the college is seeking new sources of income to support this extremely critical activity.

2. What success has the college had in keeping up with the high equipment costs associated with this program? Describe the nature and scope of recent equipment acquisitions?

The college has sought external funding through grants to offset high equipment costs. For the last three years Essex has received a Title III Challenge grant to upgrade its computer capabilities. The college also has converted many of its high-cost equipment rental agreements to less costly lease-purchase arrangements. Additionally, the college has looked to the corporate sector for equipment donations.

These external sources of funding have enhanced the college's ability to make state-of-the-art equipment available to the Data Processing program. Data Processing students have access to the college's recently upgraded, eight megabyte, IBM 4381 mainframe computer. External support has made it possible for the college to purchase the McGill University Student Interactive Computing System which allows students to enter their FORTRAN programs on a terminal and to submit jobs and review output on a screen. The college also has acquired ADABASE and NATURAL to give students experience in state-of-the-art database management and fourth generation applications development systems. Further, within the last two years the college has installed thirty-two Northern Telecom terminals, thereby phasing out most of the antiquated keypunch machines, and equipped two complete IBM personal computer laboratories for student use. The college hopes that in the near future students will be able to run their COBOL programs interactively.

3. What trends in the rapidly changing data processing field do you see as most critical to the future direction of this program? How is the college responding to these trends?

Faculty in the Data Processing program see two areas as critical to the future development of the program: microcomputer applications and communications. To meet the growing need in the community for training in microcomputer applications, the staff has designed both short-term continuing education modules and regular semester length courses which deal with microcomputer applications. They are exploring the feasibility of incorporating a CICS communications package into an existing course and offering jointly with the Accounting Department an interdisciplinary course in Electronic Data Processing Auditing. Plans are underway to work with the various student services offices of the college to recruit more vigorously both high school students and those already employed in the marketplace who need specialized training.

4. What factors account for the declining enrollment in this program?

Declining enrollment in the program seems to be linked to three factors: (1) a decrease in the number of recent high school graduates interested in careers in data processing; (2) a stronger local economy with increased employment opportunities not requiring collegiate experience; and (3) a decline in the number of returning women students seeking careers in data processing. The tremendous growth of students in the late 1970s and early 1980s was, in part, a reaction to the belief that the computer field was the field of the future. A recent study by the University of California indicates that with increased exposure to computers, high school students are discovering earlier that they do not wish to pursue careers in the various computer fields. This decline in interest among high school graduates has coincided with an increase in the number of jobs available in eastern Baltimore County. Poor economic times means good times for community colleges; and when the current wave of prosperity returned, many potential students put off furthering their education or acquiring a new skill.

To complicate the picture even more, while the anticipated future demand for data processing personnel is expected to remain fairly strong, many prospective students fear that the number of actual openings each year for graduates of associate in arts degree programs may not increase. These students may be responding to job market analysts who like to point out that because the data processing field is relatively young, there is little turnover in the industry and not much natural attrition.

5. At what level does the college expect the enrollment to stabilize?

This question is very difficult to answer. Enrollment trends over the past several years have provided no accurate means for predicting future student interest. With new recruitment initiatives, the introduction of new applications courses and modules and new scheduling patterns to accommodate the special training needs of business and industry, the college can realistically assume that the program will enroll approximately 100 full-time students and 300 part-time students. Since the college does not anticipate that the number of students pursuing the rigorous associate in arts degree program will increase, efforts will be intensified to provide short-term training modules and specialized applications courses for community users.

6. For graduates who secured full-time employment, list all of the occupational titles reported on the most recent follow-up survey.

programmer analyst trainee	computer operator
data control clerk	data entry specialist
programmer	data processing manager

7. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

Since the program's inception in 1973, the role of the Program Advisory Committee has been pivotal. The college relied heavily on the initial advisory committee for guidance in curriculum development and equipment purchases, and in subsequent years has sought advice on a wide range of issues and concerns from recruitment to cooperative education to program evaluation. At its last meeting in Spring of 1985, the committee urged the program faculty to increase the number of curricular offerings in microcomputer applications and to add courses or modules which focus on fourth generation languages, communications programming, and CICS communications. The committee also recommended that the college expand its cooperative education program to allow more students the opportunity to gain practical experience in business and industry.

Currently ten members of the advisory committee, representing every aspect of the data processing field, recruit and employ Essex graduates.

8. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

In Fall 1985, Essex introduced an internal structured academic program evaluation system. The system is designed to ensure regular review, evaluation, and revision of academic offerings at the college. The Data Processing curriculum was chosen to be one of the occupational programs reviewed in the pilot year of 1985-1986. Because of rapid changes in the technology of the data processing field and a concern about job prospects for program graduates, the faculty decided to conduct a Developing A Curriculum (DACUM) Workshop to help them identify those competencies which employees in the field were expected to possess. The purpose of the DACUM Workshop was to bring experts in the field of Applications Programming to the campus for two consecutive days to develop a DACUM chart which would then be used by the faculty to review and evaluate current curricular offerings. The results of the DACUM project will be included in the extensive program self-study to be completed in Spring 1986.

The DACUM experience was very positive. Not a single employer contacted by the college felt that a request for two full days of an employee's time was unreasonable. Each contact person seemed interested in the process and anxious to be informed about its outcome. Fifteen different companies agreed to provide DACUM panelists. The affirmative response of employers clearly reflected the outstanding relationship the faculty had developed with the professional community. It also was evident that employers viewed the DACUM process as a valuable way of informing the college of their needs in the area of applications programming.

The DACUM Workshop was extremely successful. Both the panel of experts and the faculty felt they had learned a great deal during the DACUM chart-development process. After the panel had completed its work, two of the DACUM panelists, all of the full-time faculty in the Data Processing program, and faculty representing cognate or core curricular areas reviewed every item on the DACUM chart of competencies prepared by the industry panel and determined whether the specific skill was adequately covered in the present curriculum and, if not, where and how it should be included. The faculty was especially pleased to learn that every major competency was taught in the existing program of study and that a good foundation had been laid for future work on curriculum revisions.

The work of the DACUM panel reinforced the college's view that the program is excellent. The most recent published PDMS report indicates that every graduate was satisfied with instruction in the program, and 89 percent of the employers who responded to the survey were satisfied with the employment preparation received by students.

9. If you were asked to give one piece of advice to your community college colleagues throughout the State on data processing AA and certificate programs, what would that advice be?

Create and maintain a program that is community-oriented and addresses the various needs of diverse community groups. The program should consider the needs of both large organizations with complex data control systems and smaller firms that rely on personal computers. It should provide training for both the data processing specialist and the community user who may simply want to be computer literate. It should lend support to other campus users and develop strong links in the college community with those disciplines that will increasingly use computers as tools for writing or research.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The college should review the recommendations made in the statewide evaluation of data processing programs and implement those recommendations it deems appropriate for its program.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Essex Community College

PROGRAM TITLE: Computer Technology

PROGRAM HEGIS NUMBER: 5105-01 LEVEL OF AWARD: AA

1. What factors account for the declining enrollment in this program?

The computer field experienced a period of rapid growth and increased employment opportunities in the early 1980s. Now the industry is in the midst of a decline in the number of job openings, especially at the entry-level. Presently, there are between 350 and 400 personal computer firms in the United States. Industry analysts predict that the majority of these firms will be out of business by 1987.

The tightening of the personal computer market has concomitantly affected companies that produce peripheral equipments, such as software and floppy disk drives. One industry survey found that of the fifteen floppy disk manufacturers in business in early 1984, more than half no longer existed a year later. The sector hardest hit by changes in the computer field is the semiconductor industry. This year sales are expected to drop 20 percent.

These changes in the industry have led to higher qualifications for employment in entry-level positions. A bachelor's degree in Computer Science has increasingly become the minimum requirement for employment.

The college believes that the decrease in enrollment is due to both the overall decrease in computer-related jobs and the lack of jobs requiring less than a bachelor's degree.

2. At what level does the college expect the enrollment to stabilize?

The college expects enrollment will continue to decline for graduates of the programming-oriented associate in arts Computer Technology program, while the market for graduates of four-year programs in Computer Science and associate in arts programs in Electronics Technology will grow substantially.

With the increasing demand for graduates of baccalaureate programs, enrollment in the Computer Science Transfer pattern is likely to increase. Since job prospects will remain bright for those with computer repair expertise, the college anticipates enrollment growth in the Electronics Technology program.

3. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

The Computer Technology Program Advisory Committee met in the Spring of 1985 to review the curriculum and assess the need for graduates in this field. At that meeting discussion centered on the viability of the program as it is presently constructed. There was some feeling that the type of training provided in an associate in arts Computer Technology program is no longer adequate for graduates who seek employment as programmers. A recommendation was made that the college contact major employers of computer programmers in Maryland about employment opportunities for graduates of associate in arts programs in Computer Technology. The committee also recommended major changes in the curriculum if the college decides to continue to offer the program. Curriculum revisions should emphasize microprocessors and computer languages. Additionally, to keep the program current, the college should begin to upgrade its microprocessors to 16-BIT machines. One graduate of the program is employed by an organization that has a representative on the Program Advisory Committee.

4. The number of respondents to the follow-up surveys is inadequate to draw a conclusion about the program. Submit additional information for at least fifteen students from surveys of entrants and/or graduates. The surveys can be done by mail or telephone. Present the results in a table comparable to the PDM student follow-up display; salary data are not required.

In January 1985, fifty-one questionnaires were mailed to individuals who graduated from the Computer Technology program between 1980 and 1984. Sixteen (31 percent) were returned. Of the sixteen, two individuals were in college full-time and one person was employed in a position unrelated to the Computer Technology program. The other thirteen were employed in jobs directly related or somewhat related to the program at Essex.

	n	%
Full-time job, directly related	10	62
Full-time job, somewhat related	3	20
Full-time job, not related	1	6
Part-time job	0	0
Transferred, not employed	2	12
Seeking work, not employed	0	0
Military, home responsibility, other	0	0
Total	16	100
Transferred, regardless of employment	2	12
Achieved personal goal	13	81
Satisfied with program instruction	12	75

Graduates were asked to write a brief description of their job duties and to estimate the percentage of work time spent on programming and on working with hardware. Five respondents mentioned programming in their job description and six included working with hardware. When graduates estimated the amount of time spent on programming and hardware responsibilities, most responded that their job focused on one activity or the other. Six individuals spent 75-100 percent of their time working with hardware; of the six, four do no programming at all. Four respondents spent 70-90 percent of their time programming and the remainder working with hardware. Only two people estimated a nearly even split between programming and hardware activities, and one of those has a position which requires only 20 percent time on any type of computer activity.

5. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

The following survey responses about the quality of employment preparation received in the program suggests a high degree of satisfaction:

	Excellent		Good		Inadequate	
	n	%	n	%	n	%
Programming	5	38	7	54	1	8
Hardware	3	24	8	62	2	15
Technical writing	1	8	8	67	3	25

While graduates of the program are satisfied with the preparation they received at the college, the advice from employers and the results of the graduate follow-up survey indicate that the job market which the Computer Technology program was designed to prepare students for is no longer providing entry-level jobs for associate in arts graduates. The curriculum includes a combination of scientific programming courses and hardware skills courses.

There is a job market for the two-year graduate with a background in hardware, but such positions do not require programming knowledge. Therefore, the associate degree program in Electronics Technology is a more appropriate preparation for the hardware-related job market.

Positions in scientific programming require at least a bachelor's degree, and graduates of the Computer Technology associate in arts program must attain a four-year degree in order to qualify for such openings. Thus, while the courses offered in the Computer Technology program are of high quality, it is more advantageous for students to take the courses either as part of a transfer program in Computer Science or in the associate in arts program in Electronics Technology.

6. What action(s) does the college plan to take to address the above issues?

For students who are interested in a career in computer repair and maintenance, the college feels that the Electronics Technology program, with its hardware emphasis, would be the appropriate track.

However, if the student is interested in the field of programming, the input from members of the advisory committee and feedback from students strongly suggested that it is difficult for graduates to find employment in that field unless they have either work experience or a four-year degree. With that in mind, the college intends to recommend that students who are interested in programming careers and who have a good mathematics background enroll in the Computer Science transfer program. It is further recommended that the Computer Technology program be discontinued effective September 1, 1986.

SBCC STAFF RECOMMENDATIONS/COMMENTS

Prior to discontinuing the Computer Technology program, the college is asked to consider revising it in a hardware related direction, giving emphasis to computer repair and maintenance. Several colleges have very strong programs in this area. The Electronics Technology program at Essex may not provide sufficient focus and visibility for those students interested specifically in computer hardware careers.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Essex Community College

PROGRAM TITLE: Medical Laboratory Technician

PROGRAM HEGIS NUMBER: 5205-01 LEVEL OF AWARD: AA

1. What factors account for the declining enrollment in this program?

The current perceived crisis in the health care delivery system appears to have affected enrollment in most of the allied health fields. Declining student interest in the Medical Laboratory Technician program seems to reflect a fear of limited future job opportunities. This fear has been created, in part, by media reports which often focus on layoffs in hospitals and make dire predictions about employment trends. In reality, job prospects for medical lab technicians are quite bright. To save dollars, many hospitals are hiring medical laboratory technicians with associate in arts degrees rather than baccalaureate medical technologists. With the exception of supervisory responsibilities, the tasks performed by medical laboratory technicians and medical technologists are almost identical, and the salaries of medical laboratory technicians make the positions very cost effective.

2. At what level does the college expect the enrollment to stabilize?

The Medical Laboratory Technician program is a selected admissions program. The college expects admission to the program will stabilize at thirty students per year in FY 1987.

3. For graduates who secured full-time employment, list all of the occupational titles reported on the most recent follow-up survey.

medical laboratory technician
animal technician
manufacturing technician
laboratory technician
research technician

4. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

The Medical Laboratory Technician curriculum is designed to prepare students for work in clinical laboratories. The college provides clinical training on campus and at eight affiliated hospitals--namely, Franklin Square Hospital, Loch Raven Veterans Administration Hospital, Fort Howard Veterans Administration Hospital, Greater Baltimore Medical Center, Sinai Hospital, St. Agnes Hospital, Francis Scott Key Medical Center, and Harford Memorial Hospital.

All clinical instructors at the campus are employed by affiliated hospitals or are employees of local clinical laboratories. All program officials at the clinical sites--medical directors, educational coordinators, and clinical instructors--are full-time employees of the hospitals. The program coordinator visits each clinical site monthly and reviews program needs and objectives with the pathologist, medical technologists, and students assigned to the clinic rotation. Additionally, the program coordinator consults with several private laboratories used for student field trips.

The Program Advisory Committee is comprised of college administrators, faculty, students in the program, graduates, and professionals from external health care agencies representing the field of laboratory science. These professionals include pathologists, medical technologists, chemists, and other laboratory personnel, and representatives from all of the hospitals and laboratories affiliated with the program. All program affiliates and the Red Cross employ Essex graduates.

The advisory committee meets at least once a year. In years when the program is slated for reaccreditation, the committee meets more frequently. Recent discussions at advisory committee meetings have focused on the impact which computers are having on clinical laboratory science. In hospitals and laboratories where automated and highly technical equipment has been installed, there is need for students to be computer literate.

5. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

There is much evidence to support the college's view that the program is excellent. The full employment of graduates, the national registry examination results, and feedback from employers substantiate this assessment. In 1984, the American Medical Association's Committee on Allied Health Education and Accreditation reviewed the program for reaccreditation and awarded it the maximum five-year reaccreditation. This award followed the submission of a 349-page self-study document, a two-day site visit, and a review by the National Accrediting Agency for Clinical Laboratory Science.

6. What action(s) does the college plan to take to address the above issues?

As a result of the recent extensive internal and external reviews, a number of program changes designed to enhance student competencies and increase student enrollment are under consideration:

a. The addition of a computer course to the current curriculum.

b. A request to affiliated hospitals and laboratories to incorporate equipment maintenance training into the clinical rotation.

c. Development of new marketing strategies to recruit students from area community colleges which have cooperative affiliation agreements with the Essex Medical Laboratory Technician program.

d. The introduction of new recruitment initiatives to include not only traditional high school students but also targeted adult populations, e.g., adults returning to school, displaced homemakers, persons making career changes.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Essex Community College

PROGRAM TITLE: Mental Health/Human Services

PROGRAM HEGIS NUMBER: 5216-01 LEVEL OF AWARD: AA

1. What factors account for the declining enrollment in this program?

Recent decisions on the national level to decrease the number of dollars allocated to social programs has had a significant impact on the human services delivery system. Reduced federal spending has affected the staffing patterns of most Mental Health/Human Services agencies. Additionally, associate in arts paraprofessionals are competing with credentialed professionals for employment opportunities. These factors have led to a decline in the number of students who wish to pursue a career in the Mental Health/Human Services field.

At Essex the Mental Health/Human Services program is a selected admissions program with enrollment limited to approximately thirty new students per year. The enrollment report submitted to the State Board for Community Colleges includes both those students formally admitted to the program and those awaiting admission. While the total number of students in both of these categories has fluctuated, the number of students formally admitted to the program has remained stable. After a decline (which was greatest in 1982) in the total number of students intending to enter the Mental Health program, interest in human services occupations has recently begun to increase. In the Fall semester of 1985, fifty-one students applied for admission to the program.

2. At what level does the college expect the enrollment to stabilize?

The college expects the number of students formally seeking admission to the program to increase over the next several years. To date, more than fifty applications have been received for admission to the program in Fall 1986. Thirty-one students will begin their first field placement in Spring 1986.

3. What factors account for the declining awards in this program?

Except for 1984, the number of awards has not varied significantly. In 1982, the number of students seeking entrance to the program declined substantially. That Fall the college hired a new program coordinator who undertook an extensive review and analysis of the curriculum. The curriculum was revised, new recruitment techniques were introduced, and enrollment began to increase. In 1984-1985, the number of graduates tripled from the previous year.

4. At what level does the college expect the awards to stabilize?

Over fifty students were enrolled in the introductory mental health course in Fall 1985. Most of these students have applied for formal admission to the program in Fall 1986. The college will continue to maintain the program as close to its maximum number of thirty new students per year unless community needs clearly warrant an expansion. The college anticipates that the number of awards will stabilize at twenty per year.

5. What factors account for the low placement of students in full-time jobs related to their field of training?

In Fall 1985, the college conducted its own internal survey of all program graduates for the years 1982 through 1985. The purpose of the survey was to ascertain graduates' employment status, post-Essex educational training, and satisfaction with classroom instruction and preparation for employment. The overall graduate response was very positive. The findings indicate that 79 percent of the graduates are employed. More than half of those who have not entered the job market are attending a four-year college and, therefore, not seeking employment. Ninety-six percent of those who are employed are extremely satisfied with the preparation they received at Essex. The survey also revealed that approximately one-half of the graduates have continued their education at a four-year institution. Most major in Social Work or Psychology. Comments on the survey suggest that the program's unique combination of the theoretical and the practical serves as an excellent foundation for those who transfer to senior colleges.

6. For graduates who secured full-time employment, list all of the occupational titles reported on the most recent follow-up survey.

psychiatric aide
housing coordinator
assistant clinical supervisor
problem pregnancy counselor
shelter counselor
patient representative
addictions counselor
volunteer counselor coordinator
after care worker
after care coordinator
child care worker
activity therapist assistant
residential counselor
social work assistant
mental health worker

7. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

Besides its annual dinner meeting, the advisory committee met several times to discuss proposed curriculum changes and other program-related activities. Upon the recommendation of the advisory committee, the curriculum has been modified to include a broader human service foundation.

The Program Advisory Committee also supported the college's effort to conduct a community needs assessment of its Drug Abuse Counseling certificate option. As a consequence of this assessment, new courses will be implemented in 1986-87. Recently a statewide survey of child care facilities was undertaken to determine specific curriculum needs in this field. Advisory committee members will work with faculty to incorporate the results of this survey in the existing Child Care Worker associate in arts degree option.

Over half of the members of the advisory committee represent agencies that employ graduates of the program. Thus, employers are directly involved in curriculum review and analyses of employment issues and trends. Moreover, faculty work closely with employers in the development of student field placement assignments and in the supervision of students during clinical rotations.

8. What factors account for a discipline cost per credit hour that is much higher than the average discipline cost per credit hour at the college?

College records show that in FY 1984, the discipline cost per credit hour for Mental Health/Human Services was $153 rather than $170 as reported on the SBCC PDM printout. With a 12 percent increase in the number of student-generated credit hours in FY 1985, the discipline cost per credit hour dropped to $107, or 14 percent lower than the overall college average cost.

9. This program was identified for a qualitative evaluation several years ago. What actions were carried out by the college in response to that evaluation, and what was their effect on the program?

The college is convinced that the existing curriculum provides the didactic and clinical training necessary for successful entry into the Mental Health/Human Services field. Since the last qualitative evaluation of the program, the following actions have been taken:

a. The curriculum has been revised to reflect more fully the human services aspect of health care delivery.

b. The knowledge and skills components of three field placement courses (14 credits) have been broadened to enhance the ability of graduates to compete for entry level positions.

c. Field placement opportunities have been expanded to include agencies where public interest and employment opportunities are high.

d. The Drug Abuse certificate option has been evaluated to ascertain whether its scope is too limited and whether it, as presently constructed, can adequately address current community needs.

e. The Mental Health/Human Services Department has begun a three-year grant-funded project to study worker skill traits of direct care and psychosocial workers with the goal of developing curriculum models to retrain employed workers and to train entry-level workers.

10. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

    From a qualitative standpoint, the program is excellent. The college survey conducted in Fall 1985 showed that there is a high degree of both student and employer satisfaction with the content of the curriculum and with the level of training and preparation for employment. Recently the program was awarded a three-year grant by the National Institute of Mental Health to study worker skill traits of direct care and psychosocial workers in Maryland. A likely outcome of the grant activities is the implementation of specific training recommendations which should lead to enhanced employment opportunities for graduates of the program.

11. What action(s) does the college plan to take to address the above issues?

    As part of its commitment to ensure continued program excellence and service to the community, the college plans to take the following actions:

    a. Exploration of a new curriculum model for part-time and evening students already employed in the human services field.

    b. Implementation of curriculum models developed from grant-funded studies.

    c. Expansion of the existing Drug Abuse Counseling certificate option to broaden the range of substances dealt with in the program.

    d. Implementation of the recommendations gleaned from the college's statewide survey of child care facilities.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Frederick Community College

PROGRAM TITLE: Data Processing

PROGRAM HEGIS NUMBER: 5101-01 LEVEL OF AWARD: Certificate/AA

1. What steps are being taken to attract and retain qualified full-time faculty for this program?

   Community colleges should take into consideration the opportunities that are available to faculty members with scientific, math and/or computer backgrounds. When hiring faculty, the college needs to compare its salary structures with those in business and industry. Instead, colleges often hire instructors based on generalized criteria for all disciplines. Colleges should compare their salary structure with those in business and industry.

2. What success has the college had in keeping up with the high equipment costs associated with this program? Describe the nature and scope of recent equipment acquisitions?

   Frederick Community College may be unique in that the acquisition of computer equipment for instructional purposes is often completed by the county data processing agency. The county agency maintains title to the equipment which is placed on campus for student use. This method of acquisition is thus not part of the college budget. Any equipment acquired in this manner belongs to and is maintained by the county agency.

   Frederick does make some purchases of computer equipment that are part of the college budget; this equipment must be maintained by the college.

   The combination of approaches to equipment acquisitions has enabled the college to keep current with hardware and software purchases so that state-of-the-art computer equipment is available for student use. Most recently, the college has purchased fifteen IBM PCs, several microcomputer application packages, and several Hewlett-Packard (HP) 2392 terminals for the HP 3000 minicomputer.

3. What trends in the rapidly changing data processing field do you see as most critical to the future direction of this program? How is the college responding to these trends?

   An important trend in data processing instruction is more course offerings in microcomputer software application packages. This includes computerized accounting packages, word processing packages, spreadsheets, among others. Although the college must continue to offer programming languages to students, it must be acknowledged that business enterprises are making use of these programmed packages.

The college is taking steps to address this trend by offering newly developed two-credit microcomputer application software packages. Examples of some new offerings include MultiMate word processing, WordStar word processing, and Lotus 1-2-3.

In addition, a second semester has been added to the DataBase Management course.

4. What factors account for the declining enrollment in this program?

Several years ago Frederick Community College made a concerted effort to standardize day and evening offerings of the Data Processing Department. At the same time, most courses in data processing were revised so as to make them more demanding. These adjustments, coupled with the addition of more full-time faculty, provided students an enriched program of study. However, this also caused students who were not prepared for the demands of such a program to realize their own limitations. Many of these students changed majors, causing a drop in data processing enrollments.

5. At what level does the college expect the enrollment to stabilize?

The college's expectation is that data processing enrollments will experience modest growth in the next few years. This growth will occur largely as a result of the development of new courses (mentioned in #3 above) and the addition of two new computer transfer curricula (Computer Science and Management Information Systems).

6. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

The college is continually in touch with many local firms who hire graduates or employ students through the cooperative education program. As a result of these contacts, several new courses have been developed. Although the college is in contact with members of the advisory committee about the program, the full committee has not been recently convened.

7. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

A review of the Data Processing program led to various adjustments to individual courses. The college now believes that this is an excellent program. It is a demanding program that is constantly being updated. The college is committed to closely monitoring the program in the future so that students will graduate with marketable skills.

8. If you were asked to give one piece of advice to your community college colleagues throughout the State on data processing AA and certificate programs, what would that advice be?

   Colleges should constantly monitor individual courses and programs so that they meet employers/ demands. Faculty should be encouraged to attend seminars and workshops, to keep current with new demands, languages, among others.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The college should review the recommendations made in the statewide evaluation of data processing programs and implement those recommendations it deems appropriate for its program.

The use of an active Program Advisory Committee is particularly important in rapidly changing, high-tech programs like Data Processing. The college is encouraged to officially reactivate and reconvene its Data Processing Program Advisory Committee as soon as possible.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Frederick Community College

PROGRAM TITLE: Dental Assisting

PROGRAM HEGIS NUMBER: 5202-01 LEVEL OF AWARD: Certificate

After careful review and analysis, Frederick Community College requested discontinuance of its Dental Assisting program effective Fall 1986. That request was endorsed by the State Board for Community Colleges on February 10, 1986.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Frederick Community College

PROGRAM TITLE: Park Management

PROGRAM HEGIS NUMBER: 5506-02 LEVEL OF AWARD: Certificate/AA

1. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

   The college maintains active contact with potential employers of its Park Management graduates. These employers are strong supporters of the program as evidenced by the number of graduates placed in full-time positions and by the number of current park employees who attend Frederick Community College on the recommendation of their supervisors. In addition, Park Management students conduct weekly trips to various agencies where they participate in "hands on" training.

   The Program Advisory Committee did not formally meet in FY 1985. However, advisory members have been polled individually. As a result of these contacts, four new courses were recently introduced. These new courses have increased the relevancy and value of the curriculum to potential employers. Also, some course descriptions were altered in the interest of clarity and understanding.

   Currently eight students are employed by advisory committee organizations. One of these organizations employs five students.

2. The number of respondents to the follow-up surveys is inadequate to draw a conclusion about the program. Submit additional information for at least fifteen students from surveys of entrants and/or graduates. The surveys can be done by mail or telephone. Present the results in a table comparable to the PDM student follow-up display; salary data are not required.

	n	%
Full-time job, directly related	13	87
Full-time job, somewhat related	0	13
Full-time job, not related	2	0
Total	15	100
Transferred, regardless of employment	7	47
Achieved personal goal	11	73
Satisfaction with program instruction	15	100

3. Make a value judgment about the enrollment and quality of the program. Is enrollment struggling? Satisfactory? Healthy? Is program quality low? Satisfactory? Excellent?

   The current enrollment in the Park Management program is not satisfactory. Some of the enrollment problems stem from the addition of the Wildlife Management transfer program and from a misperception by high school counselors that there are no jobs available for Park Management AA graduates. This lack of enrollment is not indicative of program quality. Rather, program quality is best reflected in individual course student evaluations and graduate follow-up survey data (see #2 above).

   In addition to the college's full-time professor, specialists from the park systems are used as adjunct instructors to teach various Park Management courses.

4. What action(s) does the college plan to take to address the above issues?

   The only concern the college has at this time is the need to increase enrollment in order to be most cost effective. The college has taken two steps:

   a. Successfully seeking statewide program designation from the State Board for Community Colleges (August 1984).

   b. Working with the high school counselors to inform them about the program and the jobs available to program graduates.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The college is encouraged to officially reactivate and reconvene the Park Management Program Advisory Committee as soon as possible.

Given the concerns about low enrollment noted above, the college is requested to establish enrollment targets for the Park Management program, to share these targets with the SBCC, and to keep the SBCC informed on progress achieved in meeting those targets.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Garrett Community College

PROGRAM TITLE: Arts and Sciences Transfer

PROGRAM HEGIS NUMBER: 4910-01 LEVEL OF AWARD: AA

1. What factors account for the low enrollment in this program?

The enrollment pattern for the Arts and Sciences Transfer program at Garrett Community College is that of a fluctuating enrollment rather than a declining enrollment pattern at this point in time.

Current enrollment data for the Arts and Sciences program indicate that the number and percentage of students in this program have increased over the previous academic year. It is evident that this program is not in a declining enrollment this academic year.

	n	%
Fall 1983	61	9.7
Spring 1984	58	9.4
Fall 1984	48	8.4
Spring 1985	50	8.9
Fall 1985	70	12.7

2. At what level does the college expect the enrollment to stablilize?

As reported above, enrollments in the traditional Arts and Sciences programs have increased at this time. While majors in these programs will probably not increase significantly, Arts and Sciences courses support the college general education requirement as well as satisfy program requirements of other transfer and occupational programs.

The college expects enrollments in Arts and Sciences programs to remain stable at between 15-20 percent of the total college enrollment.

3. What factors account for the declining awards in this program?

Declining awards in this program may be attributed to (a) fewer students declaring majors in the Arts and Sciences areas from their initial enrollment; (b) students changing majors, primarily to Business or General Studies, as they review and reconsider career choices; and (c) students in Arts and Sciences program majors transferring to four-year institutions before graduating from Garrett Community College.

	No. Arts & Sciences Graduates	% Transfer Graduates	% All Graduates
May 1983	18	47	30
May 1984	9	29	16
May 1985	10	29	18

4. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

Garrett Community College believes that the quality of the Arts and Sciences program is excellent. Instructors are well-qualified; advisors work closely with students in course selection and program articulation with four-year institutions; instructional resources are readily available to support Arts and Sciences courses; and student evaluations of courses and instructors are well above average.

Follow-up studies on Arts and Sciences graduates at four-year institutions in Maryland indicate that transfer students from Garrett Community College are in good academic standing at these receiving colleges/universities. This supports the judgment that the program quality is excellent.

5. What action(s) does the college plan to take to address the above issues?

The college plans to continue offering the Arts and Sciences Transfer program. The college is committed to providing educationally sound programs in traditional Arts and Sciences majors for citizens of Garrett County. The college plans, in its recruitment program, to place greater emphasis on these majors and make students aware of the career opportunities available with these various academic majors.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Garrett Community College

PROGRAM TITLE: Coal Mining Technology

PROGRAM HEGIS NUMBER: 5399-03 LEVEL OF AWARD: Certificate/AA

1. What factors account for the low enrollment in this program?

   The low enrollment in this program is directly attributable to the layoffs and shutdowns experienced in the coal mining industry in Garrett County at this time. During the recent past, the county's coal mining industry has experienced a 35 percent decline in employment.

2. What is the minimum number of students needed to offer a successful program?

   A minimum of ten students should be enrolled in the program.

3. What factors account for the low number of awards in this program?

   Inasmuch as new and former students are not presently enrolling in the program, there were no graduates in May 1985 while there were only two in May 1984.

4. What does the college consider to be a minimum number of awards for a successful program?

   Historically, most of the students enrolled in the Coal Mining Technology program have been part-time students. Therefore, the rate at which these students completed the program and were awarded a degree varied. The college would consider four awards per year to reflect a successful program.

5. This program was identified for a qualitative evaluation several years ago. What actions were carried out by the college in response to that evaluation, and what was their effect on the program?

   The college attempted to implement the recommendations from the 1982 program evaluation. However, in light of current declining employment opportunities in the coal mining industry (to the extent of complete shutdowns), recruitment into this program has been nonproductive.

6. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

   Garrett Community College has always believed the quality of this program to be excellent. Feedback from graduates as well as employers has indicated satisfaction with the program and individual courses. Instructors were qualified and students had the opportunity for hands-on experience and technical skill development.

7. What action(s) does the college plan to take to address the above issues?

The coal mining industry will continue to exist in some form in Garrett County. Garrett Community College will notify the State Board for Community Colleges that this program be placed on an "inactive" status. This will permit the college to have a period to evaluate and determine future trends and needs in the local and regional coal mining industry.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The college is encouraged to officially request inactive status for the Coal Mining Technology program as soon as possible.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Hagerstown Junior College

PROGRAM TITLE: Data Processing

PROGRAM HEGIS NUMBER: 5101-01 LEVEL OF AWARD: AA

1. What steps are being taken to attract and retain qualified full-time faculty for this program?

   In the last four years HJC has employed two new full-time instructors in the field of data processing. The college had no difficulty in locating qualified instructors. The source has been the college's cadre of part-time faculty. Once full-time faculty are added at HJC, a series of professional development activities is implemented to insure continued growth and satisfaction. The college provides graduate tuition reimbursement and funding for return to industry. These opportunities have been sufficient to retain a high quality faculty and maintain positive motivation.

2. What success has the college had in keeping up with the high equipment costs associated with this program? Describe the nature and scope of recent equipment acquisitions?

   Equipment costs are a major challenge facing any data processing program. HJC has managed to remain current with a rapidly changing field through a process of selective application of vocational education funds and two awards from the Washington County Commissioners. During the Fall 1985 semester, the Washington County Commissioners awarded the college $178,000 to purchase state-of-the-art computer-related equipment. The Data Processing program will receive a new 16-unit IBM microcomputer lab and an update of a 20-unit Apple IIe lab as a result of this award. It is the opinion of the college that these additions to an already adequate program will keep the college current.

3. What trends in the rapidly changing data processing field do you see as most critical to the future direction of this program? How is the college responding to these trends?

   There are two trends in the data processing field which will have direct impact upon HJC's program. The first is the continuing sophistication and miniaturization of microcomputers. As part of HJC's strategic planning process, only systems which are upgradable are acquired. For the past five years this process has allowed the college to keep equipment consistent with the needs of the service area.

Second, the increasing sophistication of the options available from a computer mainframe makes it important that the college's system be able to provide many if not all of these options. To address this concern, the college has allocated increasing funds to its computer center over the past five years. The current mainframe lease-purchase contract will expire in October 1986. The college is presently developing plans to provide the hardware and software that will enable systemwide access to mainframe power from networked workstations to be offered.

4. What factors account for the declining enrollment in this program?

There are two interrelated factors which account for the declining enrollment in this program. First, the growth rate in Washington County is stable and the unemployment rate is relatively high when compared with the rest of Maryland. The large number of associate degrees awarded in 1982-83-84 has somewhat saturated the market. Washington County citizens historically resist relocation to other areas. This problem will be somewhat alleviated by the location of two new data processing-related industries within Washington County within the last year.

The second factor is a recognition on the part of a number of students that rapid advancement in the data processing field will require more than a two-year degree. The fact that the college has 33 computer science majors in the first year of the option indicates that there will be a continuing balance between computer science and data processing.

5. At what level does the college expect the enrollment to stabilize?

It is always difficult to project enrollment trends in a highly dynamic educational and employment market; however, trends identified for academic year 1985-86 would suggest that a headcount of approximately 220-240 would seem realistic for HJC's Data Processing program. If several other new employers who are considering relocating to Washington County do so, these numbers could increase by as much as 20 percent.

6. What factors account for the low placement of students in full-time jobs related to their field of training?

A careful analysis of the August 23, 1985 PDM indicates a continuing problem faced by HJC. One hundred percent of the students responding indicated satisfaction with the instruction in their program. Yet only 62 percent achieved their personal goal. Part of this latter statistic is related to the number of individuals who transferred and perceive the baccalaureate degree as the eventual goal. However, the low pay for entry-level positions in data processing in Washington County, the current level of unemployment, and the unwillingness of Washington County residents to relocate to geographical areas beyond county borders makes it difficult to achieve a high placement level in full-time jobs directly related to data processing instruction.

7. For graduates who secured full-time employment, list all of the occupational titles reported on the most recent follow-up survey.

The following job titles were reported by individuals who secured employment following graduation in the Data Processing program:

owner/manager	computer operator
data entry operator/typing clerk III	programmer/operator
cashier	senior secretary II
computer programmer	laboratory technician

8. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

The Data Processing Advisory Committee has met twice during the past year. Two general changes were suggested. First, the addition of a database course will meet a rapidly emerging employer need. Second, the application of telecommunications in the data processing field is emerging as a significant concern. The committee charged the college faculty and staff with monitoring the trend to determine what changes, if any, will be necessitated in curriculum.

Along with the advisory committee, part-time faculty in the data processing field are drawn from a variety of businesses and industries that employ graduates of the Data Processing program. A component of their involvement with the college is meeting with full-time faculty to review course content and curriculum development directions.

As a result of the involvement of these two groups, the HJC Data Processing program remains relevant to the employment needs of the college's service area.

The college's Data Processing Advisory Committee has eight members. All of these individuals are employed by companies or agencies that employ graduates of the HJC program.

9. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

Prior to the most recent county award for equipment updating, the quality of the HJC program was satisfactory. With the integration of the new equipment by the end of the Spring 1986 semester, the program will be verging on excellent. Complete excellence, however, will only be reached when the college is able to acquire a state-of-the-art mainframe computing system.

10. If you were asked to give one piece of advice to your community college colleagues throughout the State on data processing AA and certificate programs, what would that advice be?

    The single most important factor in a successful data processing program is a curriculum supported by equipment which meets the needs of the college's service area. A major task facing any college vis-a-vis a data processing program is to keep the curriculum current and to locate resources so that equipment remains on the cutting edge of technology.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The college should review the recommendations made in the statewide evaluation of data processing programs and implement those recommendations it deems appropriate for its program.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Hagerstown Junior College

PROGRAM TITLE: Hospitality

PROGRAM HEGIS NUMBER: 5404-01 LEVEL OF AWARD: Certificate

1. What factors account for the declining enrollment in this program?

   There are three factors which have accounted for the declining enrollment in the Hospitality program. Given the economic conditions in Washington County, there has been a stabilization in the number of middle-level hospitality positions available. Students do not need a community college certificate for entry-level employment.

   Second, Washington County residents continue to show an aversion to moving outside county borders to obtain employment. When students interested in the program are informed that management trainee positions are available in the Baltimore/Washington areas, their interest in the program wanes noticeably.

   The final factor is the relatively high unemployment rate in Washington County when compared with the rest of Maryland. The number of jobs available in the overall hospitality industry has plateaued and, therefore, students are reticent to enter a field for which further education would make them overqualified.

2. At what level does the college expect the enrollment to stabilize?

   The current size of the program would seem to be that at which enrollment has stabilized. Two new hospitality properties have opened in the county in the last year. These new opportunities and an easing of unemployment conditions bode well for this program.

3. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

   During the past year there has been one informal meeting of the Hospitality Advisory Committee. Further, program instructor, division head, and dean of instruction have held a series of meetings with individuals from the committee. The purpose of these meetings was to determine what changes need to be made in the program to make it more attractive to the hospitality employer community.

Two areas of concern emerged and have been addressed. The emphasis on baking skills in the program was too great. This concern has been addressed by the removal of a baking course and the addition of another hospitality management course. The concern for increased management skill is also addressed by this change. The second generic concern was a career upgrade procedure. Members of the advisory committee wanted to be assured that after completing the Hospitality certificate, students had not reached a dead end. The articulation between the Hospitality certificate and the college's Management program has been made more precise.

The Hospitality Program Advisory Committee has eleven members. Ten of them are from organizations that employ graduates of the program.

4. The number of respondents to the follow-up surveys is inadequate to draw a conclusion about the program. Submit additional information for at least fifteen students from surveys of entrants and/or graduates. The surveys can be done by mail or telephone. Present the results in a table comparable to the PDM student follow-up display; salary data are not required.

The following table provides additional data from a survey of sixteen entrants and/or graduates. Three items are significant.

First, 88 percent of the students surveyed were satisfied with the instruction in the program. Second, the salary reported is virtually identical to the statewide average. Finally, 100 percent of the students were satisfied with their preparation for employment. These statistics are consistent with those reported by the 1982 graduates of the HJC Hospitality program.

	n	%
Full-time job, directly related	5	31
Full-time job, somewhat related	1	6
Full-time job, not related	2	13
Part-time job	4	25
Transferred, not employed	1	6
Seeking work, not employed	1	6
Military, home responsibility, other	2	13
Total	16	100
Transferred, regardless of employment	1	6
Achieved personal goal	8	50
Satisfied with program instruction	14	88
Median annual salary (four full-time employees)	$13,039	

5. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

The quality of the HJC Hospitality program at the moment is satisfactory. The work done with the advisory committee, when implemented, will move the program into the excellent category.

6. What action(s) does the college plan to take to address the above issues?

As stated above, the college has planned a series of curriculum and marketing activities designed to implement the changes needed to make the Hospitality program relevant to the needs of the college's service area. By the time the program is reviewed again, it is expected that enrollments and satisfaction with instruction will increase and satisfaction with employment preparation will remain at the level identified in the supplemental survey.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Harford Community College

PROGRAM TITLE: Business Management

PROGRAM HEGIS NUMBER: 5001-01 LEVEL OF AWARD: Certificate/AA

Since its beginning in 1957, Harford Community College has had a Business Administration degree program intended for transfer students. In 1979, Harford Community College recognized that a small percentage of students, who considered themselves business majors, chose not to graduate using the Business Administration Transfer curriculum but most often graduated in General Studies. These students had no intention of transferring and most often were employed locally by banks, public utilities, small businesses, accounting firms, retail stores, among others. When interviewed, these people indicated they wanted more flexibility regarding electives and fewer required courses (e.g., one Accounting courses as opposed to two and Business Math as opposed to Finite Math).

The faculty reviewed these requests and developed the Business Management career program. The program description in the college catalog has read since its inception, "This program is designed to enable students who do not wish to transfer to a four-year institution to obtain entry-level knowledge and skills in the field of business in which they are currently engaged." Being a practitioners degree, entry-level business skills are emphasized along with a cooperative education component. A review of catalog descriptions of business management courses emphasizes the diversity of offerings within the Business Management program.

1. What factors account for the declining enrollment in this program?

Harford Community College has experienced an overall decline or no gain in enrollment in the past two years, thus contributing to the decline in the business area. It is believed that the upswing in employment and the economy in 1984 and 1985 may have had a negative impact on enrollments. Present enrollment figures indicate a slight increase over last year. There were nineteen graduates in Business Management in 1985 compared to sixteen in 1984.

From a marketing standpoint, the college has not had new products, has not reached out aggressively to new populations, and, in some cases, participated in the development of continuing education learning experiences that siphoned off prospective credit students.

Finally, the college has not attempted consistently to "build bridges" between the Business Management AA degree program and certificate completers, nor with noncredit students completing business sequences. One person on the Business Management Program Ad Hoc Faculty Committee characterized the marketing activities of the Business Management AA program as "laid back."

2. At what level does the college expect the enrollment to stabilize?

Enrollment data in the county public schools would seem to indicate that stabilization will not be possible (particularly for the 17-18 year old full-time student) given the decline in high school graduates and college history, as an institution, in adult education and continuing education.

With no new programs; the college's emphasis on basic writing, reading, and computational skills; a stronger academic restriction policy; and with people having far more career options than ever before, it may be some time before enrollment stabilizes. Given all of the above, the 1985 Fall registrant statistics noted below certainly are encouraging.

	1982	1983	1984	1985
Fall enrollment:				
Full-time	36	42	22	19
Part-time	111	123	109	135
Total	147	165	131	154
Graduates receiving AA degree	13	21	16	19
Percentage of enrollment represented by full-time students	24%	26%	16%	12%

3. For graduates who secured full-time employment, list all of the occupational titles reported on the most recent follow-up survey.

sales representative
management trainee
supervisor
broker of commodities or services
entrepreneur
waste water management supervisor
fast foods manager
shift manager
manufacturers' representative
store owner
sales clerk
bookkeeper
insurance agent
restaurant owner

4. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

Contacts with employers occur on a regular basis through several institutional and curricular advisory committees. The advisory committees meet regularly, are productive, and are seen as an important resource of the business programs. Additionally, regular contacts occur on a semester basis with co-op employers, a major feedback loop for skills development courses.

The Business Studies Curriculum Advisory Committees, the Harford County Citizens Advisory Council on Vocational-Technical Education, and the Continuing Education Business and Industry Advisory Committee meet on a regular basis. All participants are local employers and from time to time have given valuable input at both the course and degree level. Contacts with JTPA, Economic Development Commission, and the Chamber of Commerce, while informal and more irregular than advisory committees, are considered important, particularly when planning new programs or options of programs.

5. The number of respondents to the follow-up surveys is inadequate to draw a conclusion about the program. Submit additional information for at least fifteen students from surveys of entrants and/or graduates. The surveys can be done by mail or telephone. Present the results in a table comparable to the PDM student follow-up display; salary data are not required.

At a separate meeting, the ad hoc faculty committee developed a telephone survey instrument using selected questions taken from the 1982 and 1984 graduate follow-up surveys. The committee then identified those graduates who did not respond to earlier surveys and attempted to reach them by phone. Those telephone efforts produced responses from twenty-four graduates which, when combined with the mail respondents, provided a 57 percent response rate. The committee felt this combined response rate to be adequate to draw a conclusion about the program.

The survey population numbered sixty-nine students who graduated in the Business Management program from 1982 to 1985. The results are as follows:

Year	Graduates	Telephone	Mail
1982	13	0	8
1983	21	9	0
1984	16	4	7
1985	19	11	0
Total	69	24	15

39 responses, or 57 percent of the graduates.

	n	%
Employed:		
Full-time	24	61
Part-time	10	25
Unemployed [1]	4	10
Employed in:		
Harford County	30	77
Other Maryland county	6	16
Out-of-state	2	6
Job related or somewhat related to program of study [2]	29	75
Transferred regardless of employment	14	36
Achieved personal goal	30	76
Satisfied with program instruction	39	100

[1] The four unemployed students reported that they have been unable to secure a job because the salary was too low in the field they prepared for or they have not looked hard enough.

[2] The 25 percent who said their job was not related to their program of study indicated they are getting better pay or there are better opportunities in the field in which they are already employed.

6. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

Presently, the college views program quality of the Business Management program as satisfactory. Strengths include the co-op component, classroom instruction, a well-prepared faculty committed to quality instruction, satisfactory classroom facilities, and excellent equipment.

Limitations include inadequate marketing/visibility of certificate programs, the need to expand and/or update course offerings, and options available to business students. To some extent, the college may need to consider providing some kind of placement activity or at least a clearinghouse of jobs as they relate to the business area.

Modifications and efforts necessary to improve from a satisfactory rating to one of excellent are internally possible and, with the exception of improving classroom facilities, at a minimum cost level. Renovations to Bel Air Hall, which houses most of the business classes, are currently in the very early planning stage. In the interim, enhanced marketing efforts, the implementation of the Hospitality option of the Business Management degree, and a possible Supervision certificate are seen as very positive activities.

7. What action(s) does the college plan to take to address the above issues?

The following actions and time line are proposed to address the evaluation completed by the business studies faculty:

a. Fall 1985

Reaffirm the certificate in Small Business. Given the entrepreneural climate, this is even more important than when it was approved in 1981.

Meet with the Coordinator of Community Relations for Harford Community College to develop a consistent marketing plan that addresses the degree and certificate under Business Management.

Complete and seek approval for the Hospitality option of the Business Management program.

b. Spring 1986

Review Supervision, Property Management, Office Management as possible certificate offerings and implement if data are supportive.

Through the Office of Institutional Research, monitor the Business Management program follow-up data for Spring 1986 and Spring 1987

SUMMARY

Since reviewing both the data provided by the State Board for Community Colleges and the data collected on the telephone interviews and following the meeting with the Curriculum Advisory Committee, the ad hoc faculty committee believes that the minor corrections proposed earlier in this response will be sufficient to keep the Business Management program a productive vehicle for students.

Review of the headcount and completer figures for 1985 were encouraging with the exception of the continued erosion of full-time (recent high school graduates) Business Management majors. Graduates contacted by telephone indicated that they felt the overall quality of the program was high, they were able to achieve their goals, and they were successful in a variety of employment settings.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Harford Community College

PROGRAM TITLE: Data Processing

PROGRAM HEGIS NUMBER: 5101-01 LEVEL OF AWARD: Certificate/AA

Harford Community College developed a Business Data Processing program for the 1968 academic year. Along with the degree program came a certificate program in Business Computer Programming. In 1978, Harford Community College requested approval of a certificate for Data Processing Operators. In 1984, the college eliminated a certificate in Data Processing Management requested two years earlier when there were fewer than five interested students.

Most recently, the college chose to change the name of the Data Processing degree program to Computer Information Systems. Additionally, a new option, Information Systems Management, was developed to reflect the stronger interest in transferring. A separate Computer Science transfer program (1984) emphasizing numerical analysis also is available. In summary, the computer-related curricula currently available at Harford are as follows:

Computer Science Transfer AA
Information Systems Transfer AA
Computer Information Systems Career AA
Computer Operator Certificate
Computer Programming Certificate

Recently, reductions in certificate and degree completers have occurred and, more and more, the college is addressing professional development concerns of those already employed. Simply stated, the Data Processing program has evolved from a time when certificate and AA degree completers (along with those who had bachelor degrees in other fields) had access to entry-level data processing jobs to the present time when entry at below the bachelor's degree is difficult, particularly for programmers.

1. What steps are being taken to attract and retain qualified full-time faculty for this program?

   As positions become available, the college will continue to use a national search. To date, two full-time positions have been retrenched based on current student populations. There appears to be no further need for another full-time data processing staff position. However, a half-time position with expertise on micros and advanced languages may be a realistic possibility. The college has an excellent professional development program with a strong commitment to tuition assistance, sabbatical leave, and a willingness to be flexible in the definition of a full-load in support of graduate work by full-time faculty.

2. What success has the college had in keeping up with the high equipment costs associated with this program? Describe the nature and scope of recent equipment acquisitions?

To date the college has done well with equipment costs in that the President has encouraged use of federal DVTE funding for the hardware needs of the Data Processing program. Recent purchases include a data projector and a supermicro system. The data projector will be used for teaching micro and mainframe courses. The supermicro system will be used for teaching UNIX and the "C" language as well as for word processing, English writing courses, and several professional development applications.

Another purchase (the protocol converter) made by the college, while not purchased to meet the instructional needs of the Data Processing program, can in fact have a very positive impact in the future. The Director of Computer Services anticipates that future equipment purchases will be made with multiple discipline usage in mind. Certainly the movement towards decentralization and minis and micros is more achievable financially than several years ago when large central systems had to be purchased. Presently the development costs of new courses is quite high in that faculty have to be trained and new software developed to support the courses within the lab environment. Future equipment costs will be for micros that mirror what local industry is purchasing and appropriate supporting software.

3. What trends in the rapidly changing data processing field do you see as most critical to the future direction of this program? How is the college responding to these trends?

The college will be supplementing training of professional programmers with software package courses which will be added to the program in the near future. Much of the emphasis on the new courses will be on the use of software packages by different groups of consumers. Historically, the college has moved from Data Processing Programming to Computer Science and Information Systems Management and presently appears headed towards Information Resource Mangement.

The college is keenly aware of the need to develop a Micro certificate during this academic year and expects to develop a number of credit/noncredit courses for the in-service market in Harford County as a result of the college's proximity to Aberdeen Proving Ground. There will continue to be a need for equipment and software that will stretch the limits of Harford Community College as the college follows what is being used by industry in its geographic area. The need to have hardware and software consistent with local employment opportunities continues to be important.

4. What factors account for the declining enrollment in this program?

Several factors account for the declining enrollment, but two specifically stand out--reductions in recent high school graduates and the general improvement in the unemployment rate.

At the same time, there appears to be a movement toward emphasizing the bachelor's degree, thus further limiting entry-level jobs. The 1983, 1984, and 1985 statistics clearly reflect the slowdown of high school graduates in the percentage of full-time day students majoring in Data Processing programs at Harford. Other parts of the student population are particularly interested in short/intensive training specifically geared towards employment. Part of the declining enrollment may have to do with lack of faculty availability, less than acceptable effort in the classroom, and coordination between what goes on in a classroom and the lab environment. Steps have been taken to remedy these problems over the last year.

5. At what level does the college expect the enrollment to stabilize?

The college does not have an answer to this question. It was thought that the last major reduction was last year; however Fall 1985 saw further reductions. The college looks for expansion in the micro and supermicro areas in the future; but even there a changing environment is expected. Much of what the college may be doing will have to do with teaching users how to use their hardware and software.

6. For graduates who secured full-time employment, list all of the occupational titles reported on the most recent follow-up survey.

Data Processing
programmer trainee
bookkeeper, computer operator
data technician
data entry clerk
sales, data processing
teacher, data processing
data processing librarian

Computer Programmer
computer programmer analyst
general files foreman

Computer Operator
data entry operator
clerk typist
communications equipment operator
clerk accountant
computer aided engineer
secretary

7. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

Typically the Data Processing Advisory Committee meets once a year. The 1985 agenda indicates program changes, employment prospects, hardware, and future directions were discussed. All advisory committee members represent organizations that employ graduates of Harford Community College certificate or AA programs. All curriculum changes also are discussed with the Harford County Citizens Advisory Council on Vocational-Technical Education before implementation. Coordination internally is emphasized between data processing services and data processing instruction. Contacts with industry are emphasized, particularly through field placement and co-op assignments. To date, employment of graduates has been enhanced greatly by the use of the Data Processing Field Project.

8. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

Program quality presently ranges between satisfactory and excellent. The following are seen as strengths:

- o Availability of hardware and equipment in the Data Processing Random Lab
- o Improved classroom instruction and support
- o Field placement and/or co-op placement
- o Complete course syllabi and supporting instructional materials
- o Good relationship with College Data Processing Services
- o Strong institutional support for program changes and hardware, among others
- o Articulation with both local high schools and local four-year colleges. The greatest success in this area was the articulated agreement with the University of Maryland in Computer Science. The college continues to have high hopes that an articulated agreement can be worked out this year between the Harford County Public Schools and the Harford Community College Data Processing programs.
- o Timely program changes and attempts to be flexible when responding to industry changes.

Limitations include:

- o Program development - Need staff time, need funding, and need to continue to update hardware
- o Placement resources - Should have increased placement resources
- o Emphasize planning. - Propose a three-year cycle for courses with low enrollments.

9. If you were asked to give one piece of advice to your community college colleagues throughout the State on data processing AA and certificate programs, what would that advice be?

- o Stay flexible programmatically
- o Aggressively recruit and place
- o Continue to respond to local needs

SUMMARY

Data in the table shown below (1983 - 1985 enrollment) indicate that the college's Data Processing program is still in transition.

Enrollment and Graduate Data
Computer Information Systems
and Related Certificate Programs

Fall Enrollment	1983	1984	1985
Computer Information Systems (AA)			
Full-time	144	77	35
Part-time	381	337	250
Total	525	414	284
Graduates	3	35	30
Computer Operator (Certificate)			
Full-time	15	5	9
Part-time	65	30	26
Total	80	35	37
Graduates	42	53	37
Computer Programming (Certificate)			
Full-time	13	7	7
Part-time	91	47	46
Total	104	54	53
Graduates	37	39	29

During the Fall 1985 semester, the college will propose five new courses, monitor closely the employability question (particularly for the Computer Operator certificate), and continue to design professional development courses. During the Spring semester and Summer sessions, the new courses proposed during the Fall will be implemented and re-assessed and the college will begin to use the supermicro system.

The college will continue to emphasize its relationship with Aberdeen Proving Ground and refine the intensive experiences with an eye to expanding them in the future.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The college should review the recommendations made in the statewide evaluation of data processing programs and implement those recommendations it deems appropriate for its program.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Harford Community College

PROGRAM TITLE: Registered Nursing

PROGRAM HEGIS NUMBER: 5208-01 LEVEL OF AWARD: AA

A review committee was formed to evalute the Nursing program at Harford Community College.

1. What factors account for the declining enrollment in this program?

   The review committee identified a number of factors that may account for the declining enrollment in the associate degree Nursing program. These factors include:

   a. There are fewer job opportunities, and turnover rates of nurses currently employed are declining. This has had an impact on the number of prospective students applying for admission to the ADN program.

   b. Prospective students are concerned that nursing job opportunities for new graduates are declining or are shifting to non-acute care settings.

   c. Admissions criteria were enhanced in 1984 which may have limited the pool of prospective nursing students. It is expected that there will be an adjustment to the more rigorous standards and the pool of qualified candidates will increase.

   d. There has been a decline in high school graduates from the Harford County secondary schools, therefore limiting the pool of available candidates.

   e. Occupation alternatives are increasing for women. This national trend is true for Harford County and may contribute to the reduction in the available pool of nursing applicants.

2. At what level does the college expect the enrollment to stabilize?

   The college expects enrollments to stabilize by the Fall 1986 or Spring 1987 semester. The following matrix reflects actual and anticipated nursing enrollments by core courses for Fall 1984 through the Fall 1986 semester.

	Actual					Projected	
	Fall 1983	Spring 1984	Fall 1984	Spring 1985	Fall 1985	Spring 1986	Fall 1986
101 Fundamentals of Nursing	55	41	45	28	29	25	30
102 Physiologic Response to Stressors	51	49	50	41	29	30	25
104 Psychiatric Nursing	49	50	50	43	29	30	25
200 Maternal Child Nursing	44	36	36	46	36	30	30
202 Medical-Surgical Nursing	47	40	45	49	39	30	30
203 Advance Medical-Surgical	51	51	48	43	49	50	30
206 Prof Issues in Nursing	48	46	31	46	24	49	30
Total	345	313	305	296	235	244	200

3. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

   a. During 1984-85, an extensive review of the Nursing program was conducted by a committee consisting of representatives of all segments of the health care industry. The committee included representatives from Harford Memorial Hospital, Fallston General Hospital, Baltimore Home Health Agency, Inc. of Harford County, Tri-Home Health Care and Services, Inc., Perry Point Veteran's Administration Hospital.

      The review produced a comprehensive report describing early conditions in the job market and included several recommendations for addressing changes in the health care community and resulting job market conditions.

   b. The Nursing Advisory Committee met once in 1984-85. A number of guests from home health agencies were invited to provide additional input as to how the college could provide necessary clinical experiences for students and ways in which the program could be modified to better prepare graduates to function in the changing health care delivery system. Suggestions by various members at that meeting included providing students with a rotation through out-patient surgery, same day surgeries, follow-up home visits, and greater emphasis on patient assessment and patient-family teaching. These suggestions have been acted upon and are currently being implemented where possible within the total curriculum.

c. In addition to actions recommended in Item b, the college is exploring the development of a college-based placement service.

4. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

A number of indices indicate that the Registered Nursing program is excellent.

a. Ninety-three percent of the Spring 1985 graduating class passed the State Board examinations for licensure. This figure has fluctuated over the past several years, ranging from 90 percent to 100 percent.

b. Employers have indicated a willingness to employ Harford Community College's nursing graduates and head nurses have complimented the college on the high quality of the new graduates that had been hired.

c. A survey of nursing students who completed their studies in December of 1985 (N=34) reflected a high degree of satisfaction with the Nursing program.

5. What action(s) does the college plan to take to address the above issues?

The following actions have been taken to address the above issues:

a. Marketing efforts are currently being developed. This effort will address ease of transfer of ADN graduates to upperdivision institutions.

b. A career information unit will be instituted in introductory courses to apprise beginning students of the employment situation in order to encourage them to explore and consider other types of work settings.

c. Clinical experience in the expanding work settings will result in graduates being more knowledgeable about a broader spectrum of work settings. These non-hospital sites should be considered for clinical experience.

d. Follow-up surveys with complete information about graduates will be conducted each year by the Office of Institutional Research and/or the nursing faculty in order to keep abreast of job market trends.

e. Additional coursework involving experience in various work settings after graduation may help new graduates become more employable. This could take the form of noncredit field placements.

f. Presently there is no systematic approach for helping nursing graduates gain employment. A job placement office will be requested in the 1987 budget. More assistance in job placement is needed, either within a career information unit or as an auxiliary service of the college.

g. The trends in the nursing field indicate that graduates will need to upgrade themselves professionally in order to remain marketable. The college will facilitate this by (1) providing graduates with information so that they can map an educational plan at Harford Community College and transfer institutions, and (2) offer needed coursework at sequences and times that are compatible with the needs of working graduates.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Howard Community College

PROGRAM TITLE: Accounting

PROGRAM HEGIS NUMBER: 5002-01 LEVEL OF AWARD: AA

1. What factors account for the declining enrollment in this program?

General declines in overall college enrollments in the past two years seem to be related to the county's improved economy. Comparisons of the student population characteristics to prior years indicate that male students and older students are notable for their absence from the Accounting program. Ninety-seven percent of the accounting graduates surveyed expressed satisfaction with the program, so enrollment declines appear to be unrelated to program dissatisfaction.

Additionally, HCC offered an Accounting transfer curriculum for the first time in Fall 1983, and this appears to have drawn some students from the Accounting occupational program. An analysis of detailed enrollment data shows that the combined enrollments in the occupational and transfer programs since the transfer option was first offered have increased 28 percent, from 185 to 237 students. In the Fall of 1983, only seven students registered for the transfer curriculum while 178 students (identical to Spring 1983) were registered under the occupational program. As of Fall 1985, the enrollment data show 84 students in the transfer curriculum and 155 students registered under the occupational option.

In summary, the drops in the occupational program appear to be directly related to the increased enrollments in the transfer option and reflect the planned and pursued higher educational goals of graduates who could not choose a transfer Accounting curriculum prior to 1983.

2. At what level does the college expect the enrollment to stabilize?

Enrollments are expected to stabilize at their current level and grow gradually with the population growth of Howard County.

3. What factors account for the low placement of students in full-time jobs related to their field of training.

An analysis of the occupations held by respondents to the 1984 graduate survey show that 33 percent held upper-level accounting or accounting-related positions and 33 percent held lower-level accounting positions. Additionally, 50 percent of all the graduates were attending four-year colleges, of which 24 percent were not currently working. This relatively high percentage of students electing to pursue four-year degrees before seeking positions may account for the low placement record reported by the SBCC.

4. For graduates who secured full-time employment, list all of the occupational titles reported on the most recent follow-up survey.

president	property accountant
accounting supervisor	bookkeeper
financial officer	accounting clerk
contract analyst	account receivable clerk
assistant dean of administration	accountant

5. Describe the contacts you have had with employers about the curriculum and the needs for the program.

Under the co-op education program, supervisors are interviewed to determine not only student performance but limitations of the program and suggested improvements. All prior employers surveyed indicated they would be willing to hire another student and none was displeased with overall competency and capabilities of students. The responses did indicate today's growing demand for microcomputer familiarity and ultimate need for a four-year degree if a student desired working in other than bookkeeping-level positions in accounting.

The program advisory committee met twice during the past year. No changes or revisions were suggested by the committee. However, the college is making significant changes within the existing courses. Eventually most of the accounting courses are planned to include Computer Technology as an integral learning component. Computer requirements were instituted in Intermediate I and II and in Principles II accounting courses as of Summer 1985. Currently all but two members of the Program Advisory Committee are from organizations that employ graduates of the program.

6. Make a value judgement about the quality of the program. Is the program quality low? Satisfactory? Excellent?

Program quality would have to be rated excellent. Of the 1984 graduates surveyed, 53 percent were extremely satisfied and 47 percent were satisfied by the college preparation for employment. The overall rating by employers on a scale of 1 to 5 was 4.15, and all employers responding to whether they would hire another student answered "yes." On overall quality, approximately 90 percent of the currently enrolled students responded that the program was satisfactory or excellent.

7. What action(s) does the college plan to take to address the above issues?

The high demand on the part of employers for micro and computer familiarity (91 percent of those surveyed felt a micro course should be required) has been met by incorporating microcomputer requirements into Intermediate Accounting I and II and Principles of Accounting II. Also in the Fall 1985, a microcomputer course became available. The college has invested in a microcomputer lab with 20 IBM PCs. Since the last review, the transfer option in Accounting has been made available. Substantive efforts have been made to disseminate information regarding courses, options, and alternatives through both select mailings and general publicity. Much greater emphasis also has been placed on the advising process to assist students with planning, information, and curricular options.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Howard Community College

PROGRAM TITLE: Housing Management

PROGRAM HEGIS NUMBER: 5004-03 LEVEL OF AWARD: Certificate

The college has requested that this program be discontinued; the State Board for Community Colleges endorsed the discontinuance in February 1986.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Howard Community College

PROGRAM TITLE: Residential Construction

PROGRAM HEGIS NUMBER: 5317-03 LEVEL OF AWARD: Certificate/AA

1. For graduates who secured full-time employment, list all of the occupational titles reported on the most recent follow-up survey.

equipment operator
punch-out man
office manager
siding mechanic
electrical contractor
general contractor
carpenter
carpenter foreman
third-year apprentice
plumber

2. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

Contacts with employers have been minimal this year since the college did not have a full-time faculty member to coordinate the program. The advisory committee did not meet this past year for the same reason. Changes to the curriculum are addressed in the responses to questions 4 and 6 below.

3. The number of respondents to the follow-up surveys is inadequate to draw a conclusion about the program. Submit additional information for at least fifteen students from surveys of entrants and/or graduates. The surveys can be done by mail or telephone. Present the results in a table comparable to the PDM student follow-up display; salary data are not required.

The college conducted a special survey of Construction Technology students and former students in response to the SBCC call for additional follow-up information. One hundred twenty-six questionnaires were mailed, with eighteen returned as undeliverable. Twenty-four people returned the questionnaires, for a response rate of 22 percent.

Ten respondents were working in jobs that are clearly construction/carpentry oriented, while another four had jobs that might be considered related to carpentry. Thus, the percentage of respondents employed in a training related field is 44-58 percent.

Of the thirteen respondents who got their current jobs during or after being at HCC (where this might be an indicator of career paths in Construction Technology), seven were in training-related jobs, two were in somewhat related jobs, four were in jobs unrelated to their training, and one person is retired. Of the eight respondents who got their jobs before coming to HCC, three were in training-related areas, two in somewhat related ones (electrical contractor and plumber), and three were not related.

4. What factors account for a discipline cost per credit hour that is rising much faster than the discipline cost per credit hour statewide?

During the period 1984-85 and the first semester of 1985, there has been a decrease in the expenditures for instructional supplies and materials. These expenses, aside from salaries, have been the largest single allocation of funds in support of the program. The supply expenses for these periods were: 1984-1985, $4,557; 1985, $2,347.

In the academic year 1983-1984 the total instructional expenses were approximately $16,000. The most recent two years show a significant reduction in these expenditures. Howard Community College is aware of only one other comparable program in Maryland--the Carpentry program at Cecil Community College.

5. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

The program would have to be judged as satisfactory although requiring attention. There is a need to review the credit/contact hour structure in order to make the program more convenient to part-time students. Details are presented in response to question 6.

6. What action(s) does the college plan to take to address the above issues?

The college will review the entire combination of certificate programs in Construction Technology and attempt to refine and decrease the number of credits and contact hours required for each course. This will be done during the Spring 1986 semester.

Also of note, for the past two years, in conjunction with the Patuxent Institute, HCC has offered a certificate program in Residential Construction. In FY 1985, twenty-nine students were awarded basic level certificates at the Patuxent Institute. Twelve students are continuing on for their advanced certificate and nine students are presently working on their basic certificate.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Montgomery College

PROGRAM TITLE: Business Administation Transfer

PROGRAM HEGIS NUMBER: 4970-01 LEVEL OF AWARD: AA

1. What factors account for an enrollment-to-awards ratio that is more than twice the State average?

   The college feels the factors involved are generally positive. For instance, there are many students who tentatively classify themselves as Business Administration Transfer students but who later change their minds in light of greater self-knowledge, perhaps with the aid of continuous counseling. Also, the opinion is that the college has many students who intentionally use the Business Administration Transfer program as a "place holder" while attempting to ascertain a firmer career or educational commitment. Further, some students are primarily interested in transferring but not necessarily earning the formal AA degree. Their objective, it appears, is to simply earn some business administration credits and then transfer without a degree. From their viewpoint, therefore, this program's existence has been justified.

2. What factors account for a loss of credits upon transfer that is above the State average?

   There are several factors that may account for this reported phenomenon. One factor is simply strong student preference for certain courses which are taken without regard to their transferability. These courses tend to be taken primarily for the enjoyment of the courses. Another factor may be a desire to "sample" certain courses, again without thinking about transferability of credits. Still another factor is the positive decision, on the part of the students, to change from a non-business program, to the Business Administration Transfer program. This usually mean they, at the point of decision, have earned a lot of non-business credits, which will not necessarily be transferable to another institution.

   The college has articulated the program with the University of Maryland College Park, which is the institution to which the majority of the Business Administration students transfer. If students follow the college's recommendations, they will be able to transfer all of their coursework to the University of Maryland. In short, the fact that students lose credits relates largely to taking courses that are not recommended.

3. What factors account for grades at the transfer college that are below the State average?

The assumption behind this question apears to be inconsistent with the data below:

Grade Point Average of Graduate Respondents
Who transferred to Other Schools

GPA	Upon graduation from Montgomery		While enrolled at transfer school	
	n	%	n	%
Less than 2.0	6	1	8	2
2.0 - 2.4	59	18	40	14
2.5 - 2.9	85	26	83	30
3.0 - 3.4	101	32	92	33
3.5 or more	73	23	58	21
No response	-	-	35	-
Total	324	100	316	100

Source: A Study of 1982 Montgomery College Graduates issued by Office of Institutional Research, June 1985.

4. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

The quality of the program is satisfactory. This value judgment is supported by data from the college's 1985 study of 1982 graduates. According to this study, 94 percent of the college's transfer program graduates are satisfied with the transfer preparation they received.

5. What action(s) does the college plan to take to address the above issues?

The college will continue to improve the advising process to encourage students to adhere more closely to academic and programmatic recommendations, while keeping in mind that students do have objectives that do not always lead to the kind of outcome measures on which the college is asked to report.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The self-reported transfer data of the 1982 graduates, as reported to the SBCC and shown on PDM, indicate that only 29 percent of the graduates had a GPA of 30 or better at the transfer institution when they responded to the survey--not 54 percent as shown in question 3. The college is asked to clarify this apparent discrepancy in data.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Montgomery College

PROGRAM TITLE: Computer Science and Technology

PROGRAM HEGIS NUMBER: 5103-01 LEVEL OF AWARD: Certificate/AA

1. What steps are being taken to attract and retain qualified full-time faculty for this program?

The computer science faculty at Montgomery College's three campuses has experienced a small turnover overall in recent years. During 1984-85, there were eight faculty vacancies collegewide and approximately one hundred new applicants for those computer science vacancies. Recruitment sources included The Washington Post, Baltimore Sun, Chronicle of Higher Education, The Washington Informer, and a list of approximately sixty affirmative action sources.

The college has been able to attract, develop, and retain an experienced faculty without any major difficulty. Those committed to teaching computer science are aware of the salary levels available and the attendant sacrifices these levels may require. The college is able to provide, through its education assistance and scholarly activities program, time for faculty study, research, and professional development.

2. What success has the college had in keeping up with the high equipment costs associated with this program? Describe the nature and scope of recent equipment acquisitions? Describe the nature and scope of recent equipment purchases.

The college, through its five-year computing plan, has been successful in implementing an integrated system of management information relating to students, courses, curriculum, finance, and budget. In that regard, annual reviews are made of academic computing equipment and, where appropriate, justified, and consistent, with the five-year plan, new state-of-the-art equipment is requested.

By keeping current with state-of-the-art technology, Montgomery College has been able to avoid, or offset, higher costs of equipment with more efficient operations. While the number of terminals attached directly to the mainframe computer has increased from 36 to 120 in the last three years, this has been partially offset by discontinuing all key punching equipment and costs associated with handling punched-card data. Batch computing for academic instruction has given way to on-line, interactive computing. Improved telecommunication facilities have enabled faster data transmission speeds and full-screen editing capabilities. This results in the ability to handle more student work without a corresponding increase in equipment. A mainframe replacement three years ago resulted in computer "up-time" of 98.7 percent compared to the previous experience of 76 percent.

In FY 1985, $559,000 was allocated from the capital budget for equipment purchases, with an additional $38,400 from individual department operating budgets. For FY 1986, another $586,000 is budgeted for instructional computing, mostly for the acquisition of personal computers. Microcomputer labs have enabled the college to combine usage between the computer science curricula and increasing demands from other disciplines, such as music, accounting, and math/science. This shared usage has provided cost savings relative to the alternative of each department having its own microcomputer systems.

Microcomputer purchases, essential to support the evolving nature of new coursework and curricular development which demands them, are acquired with substantial discount through State purchasing contracts. Current equipment installations are being implemented according to the referenced five-year plan.

Many of the recent equipment acquisitions have been IBM personal computers and compatible peripherals. The decision to use the IBM protocol is consistent with the need to prepare students for career and advanced study opportunities since IBM and IBM-compatible systems constitute about 70 percent of microcomputer installations in business firms.

Another recent acquisition has been a series of CAD (computer-aided drafting) microcomputer systems for use in Pre-Engineering, High-Tech, and Computer Applications courses. In addition to current course offerings, the equipment is also equipped to process graphics and telecommunications applications as coursework for them is developed.

High-speed printers are being installed on all three campuses for remote printing of computer output without making users wait, often overnight, for courier-delivered printouts. Additions to the remote telecommunication controllers also allow productivity enhancements through the use of full-screen editing on terminals attached to the mainframe system.

3. What trends in the rapidly changing data processing field do you see as most critical to the future direction of this program? How is the college responding to these trends?

As a discipline matures, its knowledge and skills tend to specialize. In the field of computer science and technology, the college sees evidence of this maturation process in several trends which involve the increasingly complex and diverse nature of these technologies, their theory, and their applications:

- First, the rapid growth of computer usage in business and government has fostered the development of the field of "information systems" (known commonly as IS). Four-year institutions now commonly offer specialized programs in IS. The college's current Business option is defined as a career option and does not adequately prepare students to transfer into these programs; nor does the Science/Math option.

- Second, the more theoretical side of computer science has grown rapidly in recent years and the Science/Math option does not adequately address many of the requirements that students need to transfer into four-year programs which have been brought up-to-date.

- Third, the Association of Computing Machinery (ACM) has prepared model curricula which are widely respected and used as outlines for two- and four-year degree programs. Neither of the existing options matches the present ACM curricula very well.

- Fourth, the veritable explosion of microcomputer usage in business, government, and by individuals at home has created an enormous demand for conceptual learning and skill-training in this area. The college needs to provide a range of courses from the most rudimentary to the moderately sophisticated to assist the user in the evaluation, selection, and use of various microcomputer hardware and software items.

- Fifth, the trend toward a wider acceptance of these technologies has expanded the demand for computer literacy courses for those who want a general familiarization with the field.

The college is responding to these trends by developing a revised curriculum. That curriculum has been approved by the college and has been forwarded to the SBCC for approval.

The two current curricula options have been revised and two new ones added. That revision has resulted in two transfer options rather than one, and two career options rather than one.

Information Systems (IS). This new transfer option is designed to lead into four-year programs in Information Systems, like the one at the University of Maryland College Park and University of Maryland Baltimore County. (IS refers to the analysis and design of sizable systems to meet client needs.)

Computer Science (CS). This is the new name for the current Math/Science option. It is designed to transfer to four-year programs in Computer Science (the term now commonly used for the theoretical side of this field).

Business Programming (BP). This is the new name for the present Business option, modified to better prepare graduates for entry-level commercial and government programming positions.

Computer Applications (CA). This new career option focuses on small computer systems, their evaluation, selection, integration, software selection, and use of existing program packages for the solution of business and scientific problems.

The curricula for the CS and IS options are based on the ACM model curricula and provide for maximum transfer of courses to other instituitons. The BP option is a slight revision of the present Business option. The CA option encompasses several new courses to offer applications training in a variety of business and scientific areas.

The entire proposal has been reviewed and approved by the Community Advisory Committee and is in the college's approval cycle.

4. What factors account for the declining enrollment in this program?

The college believes that the recent downturn in enrollments in this program derives from several related factors. First, the computer industry has been in a slight slump recently and as a result the opportunities are not as high as several years ago when enrollments were advancing sharply. Second, in spite of the industry slump, some of the excitement and glamour of the field of a few years ago is gone. The misconception that many students apparently had that computer science meant easy job security has been replaced with the more accurate conception that computer science requires a certain rigorous approach to problem-solving that some students had not realized. Third, the college's program has responded slowly to the rapidly changing technology. Students are not being as well prepared for transfer or career as when the program was designed about six years ago. Note the response to question 3 regarding the college's effort(s) to meet the changing trends.

5. At what level does the college expect the enrollment to stabilize?

The college expects that enrollment will continue to respond to technological and economic factors and that no long-term stability in enrollment will ensue until the technology itself stabilizes. The field is complex and is at the leading edge of change in our culture; hence, it is more subject to market influences than more traditional fields. There must be a sensitivity to those influences and the college must continually modify the program to accommodate the changing educational needs of the various constituencies.

6. What factors account for the low placement of students in full-time jobs related to their field of training?

The responses to the study of 1982 Montgomery College graduates show that 25 percent of the graduates are employed full-time in directly related jobs and 18 percent in somewhat related jobs. The total of these two categories, 43 percent, compared to the statewide data reported on the PDMs of 48 percent, is not significantly different.

The number of students transferred to four-year institutions from Montgomery College is 57 percent compared to only 42 percent statewide. Of the 28 respondents who transferred, only nine were employed full-time while enrolled at school full-time. The higher percentage of graduates transferring helps explain the apparently low percentage of full-time job holders.

7. For graduates who secured full-time employment, list all of the occupational titles reported on the most recent follow-up survey.

From a 1984 survey of Maryland community college graduates:

accounts payable personnel
consultant
computer systems analyst
research assistant
computer specialist
clerk typist
staff specialist
senior engineer
data editor
office manager
computer customer service representative
microcomputer operator
R&D editor
computer programmer
MD's assistant
technical associate
systems analyst
program analyst
engineering technologist
X-ray technician
general engineer

8. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

The Computer Science and Technology faculty met with the advisory committee twice last year to continue discussion begun the previous year regarding upgrading the curriculum. The curriculum revision process was an iterative one: the faculty working on the design and then presenting it to the committee for comments. This was found to be a very practical and satisfying way to operate with the "real world" perspective of business and industry being brought directly into the design process. They offered many detailed suggestions and concurred heartily with the overall design concept (see the response to question 3).

Four members of the advisory committee are from organizations that employ graduates of the program: General Electric, Libra Data, McDonald-Douglas, and the University of Maryland.

9. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

Considering all of the above, the college believes the program to be satisfactory. With the upgrading of the curriculum, it is felt that the college shall again be fully responsive to the needs of the community and moving again toward excellence.

10. If you were asked to give one piece of advice to your community college colleagues throughout the State on data processing AA and certificate programs, what would that advice be?

Stay responsive to your constituencies; maintain flexibility by initiating and operating an ongoing planning process.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The college should review the recommendations made in the statewide evaluation of data processing programs and implement those recommendations it deems appropriate for its program.

The SBCC staff approved the revised Computer Science and new Information Systems Transfer options in December 1985; the revised Business Programming career option also was approved at that time. The Computer Applications of curriculum was judged to be a new program area and thus will be submitted to the State Board for Community Colleges and the State Board for Higher Education for full review and approval.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Montgomery College

PROGRAM TITLE: Computer Operator

PROGRAM HEGIS NUMBER: 5104-01 LEVEL OF AWARD: Certificate

1. What success has the college had in keeping up with the high equipment costs associated with this program? Describe the nature and scope of recent equipment acquisitions?

   The college has been relatively successful in keeping up with the high equipment costs associated with this program by simply making use of the appropriate equipment acquired by the college for purposes other than for this program. In effect, the college is gaining some marginal benefit with little cost.

   Unlike other computer-related programs of the college, this program's most important and most distinctive need is for hands-on access to a mainframe machine, not for the ordinary programming learning experience but for the acquisition of first-hand knowledge in the handling of physical routines and procedures that a computer operator performs in a mainframe computer center. Therefore, the cost of the mainframe and the peripherals in the computer center represents relevant data for this response. As of this date, the mainframe configuration and the latest upgrades undertaken by the college total approximately $192,000. These include the mainframes, terminals, printers, and communication equipment.

2. What trends in the rapidly changing data processing field do you see as most critical to the future direction of this program? How is the college responding to these trends?

   The business world is tending away from the exclusive use of mainframes and towards the use of microcomputers. However, there will continue to be a significant inventory of mainframes that will require operating personnel. Another trend is the increasing concern for greater security surrounding computer systems. Because of the potential for unauthorized access to certain sensitive data in the mainframes, this concern will definitely impact on the program.

   The college is responding to these trends by carefully monitoring the mainframes-microcomputer shift and continuing to consult with the existing advisory committee, which is comprised of industry representatieves. The college is also constantly improving its security controls and procedures in response to the several trends noted above.

3. What factors account for the declining enrollment in this program?

College data do not reflect the declining enrollment mentioned in the question. The decline may be true for computer-related courses in general, but for this program in particular, the data below indicate that the enrollment is stable.

Term	Enrollment
Fall 1982	99
Spring 1983	100
Fall 1983	118
Spring 1984	109
Fall 1984	109
Spring 1985	98
Fall 1985	154

(Based on enrollment in CS 127, 128, and 130, which represent the core of the program.)

4. At what level does the college expect the enrollment to stabilize?

Judging from the stability of enrollment in the last seven semesters (see above), the college expects enrollment to stabilize at a headcount of about 95 per semester.

5. What factors account for the low placement of students in full-time jobs related to their field of training?

Without claiming to know all the factors influencing actual placement, the college believes that one critical factor involved is the increasing competition from four-year school graduates accompanied by the growing number of employers who demand a baccalaureate degree for entry level positions. Another factor may have to do with the fact that 60 percent of the students work 30 hours or more per week.

6. For graduates who secured full-time employment, list all of the occupational titles reported on the most recent follow-up survey.

The job titles of graduates securing full-time employment include:

computer operator
data control clerk
data entry clerk

7. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

The Computer Science Advisory Committee, comprised of industry representatives, has advised that the program be discontinued. The committee meets at least once each semester, and it includes representatives from federal and local governments, area businesses, adjunct faculty, and Montgomery College graduates. Currently no members of the committee are from organizations that employ graduates of the program. In the Fall of 1986, the Dean will recommend that at least two businesses which hire program graduates be appointed to the advisory committee.

Some members of this committee feel that the college should consider phasing out this program in the future in view of the gradual trend away from mainframes to microcomputers. Others feel that despite the gradual trend, there will be a minimum number of mainframes in relatively large organizations, which will require the services of persons with skills provided by this program. Some members of the committee point out that there are certain functions for which the microcomputer is considered an inadequate replacement of the mainframe computer. Contact with employers also is maintained through the placement of students enrolled in the Computer Operator II (practicum) course.

8. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

The value judgment is that the quality of this program is satisfactory. A majority of the graduates have expressed satisfaction with the employment preparation they received from the program.

9. What action(s) does the college plan to take to address the above issues?

The college will identify a larger number of organizations that use mainframes with a view to securing greater access to mainframes other than the ones owned by the college.

10. If you were asked to give one piece of advice to your community college colleagues throughout the State on data processing AA and certificate programs, what would that advice be?

a. Survey local employers about the extent to which they will continue to use mainframe computer systems.

b. Review employers' security procedures and see if the procedures that are taught are consistent with industry practices.

SBCC STAFF RECOMMENDATIONS/COMMENTS

While enrollment in three core courses of this program have remained stable (see question 3), it should be noted that the number of students declared as majors in this program has declined from a peak of 471 in Fall 1982 to 309 in Fall 1985, a decline of 34 percent.

The college is requested to provide a status report by June 30, 1986 on: (1) whether new members have been appointed to the advisory committee who do in fact employ graduates of the program; and (2) whether the advisory committee still recommends discontinuance of the program.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Montgomery College

PROGRAM TITLE: Mental Health Associate

PROGRAM HEGIS NUMBER: 5216-01 LEVEL OF AWARD: AA

1. What factors account for the declining enrollment in this program?

The enrollment in the Mental Health Associate (MHA) program has remained constant. Fifteen to eighteen students are admitted each semester which does not indicate a decline in enrollment. Usually the data contained in the Program Data Monitoring System (PDMS) do not reflect the true enrollment in the MHA program for this reason: When students first enter the MHA program, unless a Change of Curriculum form is processed at the time of entry, the student may never be credited to the MHA program. In the Fall of 1984, there were 26 such students--bringing the total enrollment to 65, rather than the 35 reported by the PDMS. Most of the 26 students not properly identified were listed under the General Studies category, the curriculum they first selected upon entering Montgomery College. To correct this situation, in the future all students entering the MHA program will have to complete the Change of Curriculum form upon admission.

2. At what level does the college expect the enrollment to stabilize?

Since the college has admitted about the same number of students each year since 1970 (32-36), the MHA program has stabilized at about 65-70 students in the curriculum at most times.

3. What factors account for the low placement of students in full-time jobs related to their field of training?

The data obtained by PDMS do not reflect the true status of the MHA graduates since the analysis was based on a very small response to the survey. Only eight questionnaires were returned. A survey was conducted in Fall 1985 by the coordinator of the MHA program with the following results:

a. Of the 78 students graduating from the program between January 1982 and August 1985, 61, or 78 percent, replied to the survey.

b. Of these, 42 (or 69 percent) were working in mental health related fields.

c. Sixteen (or 26 percent) have continued their education in related areas.

The following table provides further details on the results of this survey:

a. Number of graduates (January 1982 thru August 1985) 78

b. Replied to survey--61 (78 percent)

	n	%
Working in related fields	42	69
At school for higher degrees	16	28
Volunteer in human services	1	2
Working in unrelated field	2	4

c. Salary range: $9,200 - $21,000

d. Salary distribution per annum--adjusted (for those working in related fields)

$9,000 - $9,999	2
$10,000 - $10,999	4
$11,000 - $11,999	2
$12,000 - $12,999	6
$13,000 - $13,999	5
$14,000 - $14,999	2
$15,000 - %15,999	3
$16,000 - $16,999	3
$17,000 - $17,999	1
$18,000 - $18,999	3
$19,000 - $21,000	1
Volunteers	1
Salary unknown	9

e. Advanced study in educational fields:

Social Work
Psychology
Community Development and Family Studies
Psychosocial Rehabilitation
Therapeutic Recreation
Forensic Psychology
Gerontology
Nursing

These data agree with all of the surveys conducted by the MHA coordinator since 1979. For example:

	Number of graduates	Number who replied		Working in Mental Health related fields	In school for higher degrees
1980-83	87	57	66%	61%	31%
1982-84	66	49	74%	70%	29%

4. For graduates who secured full-time employment, list all of the occupational titles reported on the most recent follow-up survey.

coordinator of student interns
child advocacy investigator (law firm)
residential counselor
client service coordinator
house counselor
counselor/supervisor
social worker assistant
addictions counselor
work crew coordinator
alcohol counselor
nurse technician
nursing superior, psychiatric ward
parish counselor
geriatric assistant
art therapist
family counselor
mental health associate
group home counselor
mental health counselor
social worker aide
activities leader
program assistant
police technician
psychiatric technician
case worker
child care program teacher
instructional assistant (in school system)
program assistant (at senior citizen center)
activity coordinator (at senior citizen center)
assistant director of day care (young children)
case manager of residential program (for ex-hospital patients)

5. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

Since all but one of the advisory committee and the student members are administrators or supervisors of the human services facilities where students do their internships and are frequently employed upon graduation, the coordinator and the faculty of the MHA program have frequent contact with the advisory committee members although the total committee and faculty meet only once a year.

Employers of the graduates are very pleased with the quality of their work. Following are two examples of the kind of feedback received from field placement supervisors:

- "Your students are trained in what is relevant to the work we do at our center. They have training and experience which are very hard to find even in a graduate program." (Supervisor at Regional Institute for Children and Adolescents)

- "Your students have a unique training background in group experience which is most unusual at their level. I don't get interns with that kind of group experience and training from any other educational program." (From a conversation with the director of a day care center in Montgomery County for patients released from State mental hospitals)

At this year's meeting with the advisory committee, adding a track in gerontology was discussed. There are several committee members who work in this field, and they have advised the college that the field was opening up with many jobs for students with training similar to what the program offers. Many requests for interns and workers are made of the MHA office from senior citizen centers and nursing homes. Montgomery College graduates have been hired as activity leaders and counselors at these facilities.

6. This program was identified for a qualitative evaluation several years ago. What actions were carried out by the college in response to that evaluation, and what was their effect on the program?

Quoting from the reply to this question in the previous evaluation: "If, however, due to socio-political changes in our society, our graduates are not able to procure employment, then the college would evaluate the need to change the program to a transfer option or possibly eliminate the program from its curricula offerings."

Since the data, as noted above in response to questions one through five, and seven, indicate that more than two-thirds of Montgomery College graduates continue to get rewarding jobs in the mental health and social services and only about one-quarter transfer to schools of higher education in related fields, the college feels it would not be appropriate to convert the program to a transfer option. Neither does it seem to be feasible to discontinue the program as there continues to be a lively interest in mental health careers and the graduates continue to find employment in entry-level positions. The MHA curriculum provides graduates a fine opportunity to get working experience in the human services and apply this experience at higher levels or to use it for background in upper division educational programs.

7. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

Excellent. In both formal and informal feedback about the MHA program, the recurring themes are about the excellent quality of Montgomery graduates and students.

a. Frequently expressed appreciations from administrators of human services institutions related to:

- o the relevance of graduate training to the jobs to be done;
- o the high level of graduates' interpersonal, especially communication and listening, skills;
- o surprise about the extent of graduates' group experience and training;
- o graduates' willingness to learn new skills and to take on difficult clients;
- o (from a social work school director where Montgomery graduates frequently transfer) "Send me all of your graduates--they are the best prepared for the human services."

b. From graduates of the Montgomery College MHA program:

- o "Group Dynamics classes were invaluable (student coordinator at day care center);
- o "I feel my education with your program is superior to any other training/education I've had since" (student at University of Maryland, residential counselor);
- o "I feel well prepared for my work as a client services coordinator";
- o "My best and most beneficial education was at Montgomery College" (assistant director at a day care center);
- o "The staff of instructors was always ready to help its students, making that help a priority" (graduate student at University of Maryland);
- o "The skills learned at Montgomery College MHA program have been of great value in my current job success" (social worker/legal assistant).

8. What action(s) does the college plan to take to address the above issues?

The coordinator will continue to make frequent surveys of the graduates. Contact will be made with the Office of Institutional Research to try to correct the omissions resulting from the present data collection system. As noted in question 1, a better method of identifying students matriculating in the MHA program has been developed. As a result of the information about the expanding employment opportunities in gerontology, the advice of the Program Advisory Committee, and in consultation with the Maryland Consortium for Higher Education in Gerontology (of which the coordinator is an active membr), an option in gerontology has been developed for the MHA program.

If new trends in employment develop, the college will add other options targeting specific clientele to the present MHA curriculum, i.e., children and adolescents.

If there are more students planning to transfer to universities to continue their education in allied fields than there are graduates seeking employment immediately (as is the case now), the college could switch the educational emphasis to preparation for transfer. It should be noted that the option to transfer at graduation has always been considered a secondary objective of the MHA program.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The enrollment data reported on the PDM are data reported to the SBCC by the college. If the data are not being reported accurately for the Mental Health program (see questions 1 and 8), the college should take steps to see that they are.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Prince George's Community College

PROGRAM TITLE: Secretarial Science

PROGRAM HEGIS NUMBER: 5005-01 LEVEL OF AWARD: Certificate/AA

1. What success has the college had in keeping up with the high equipment costs associated with this program? Describe the nature and scope of recent equipment acquisitions?

   The combined efforts of the credit and noncedit programs have enabled the joint purchase of equipment to provide a 28-station word processing laboratory and up-to-date electronic typewriters and audio-visual instructional equipment and materials for use in other secretarial courses.

   The college has recently established a "replacement/update" policy, effective in Fall 1985. The initial purchase involved an upgrading of word processing equipment purchased in 1981 and a classroom of typewriters purchased ten years ago.

2. What trends in the rapidly changing office automation field do you see as most critical to the future direction of this program? How is the college responding to these trends?

   The most widely felt trend in office automation is the concept of the totally interconnected office, utilizing personal computers, minicomputers, and mainframe configurations. Dedicated word processing equipment will have its place in the office. However, networking and linkages between offices appear to be the current trend. Office workers will not only be expected to have word processing skills, but also be skilled in telecommunications, data base management systems, spreadsheet programs, and graphics packages.

   Students enrolled in the Office Technology program will, of course, have heavy emphasis on word processing but in their required data processing, word processing concepts, and secretarial practice classes will learn about the related areas and how they fit inot the total scheme of the automated office.

3. What factors account for the declining enrollment in this program?

   Declining enrollment can be attributed to several factors:

   a. The improved economy--making more office jobs available, de-emphasizing the need for advanced skills training in order to obtain positions.

   b. The high school student population decline.

4. At what level does the college expect the enrollment to stabilize?

The enrollment level is expected to stabilize at the current level. Some slight upward movement is anticipated.

5. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

Ongoing contacts are maintained with employers through the cooperative education program, the advisory committee, and graduate surveys regarding needs for trained office workers.

The Program Advisory Committee has met each Fall and Spring semester since it was reorganized in May of 1984. The committee made recommendations in the areas of shorthand and general secretarial training.

One major recommendation of the advisory committee concerned the stenographic program. This program has since been modified, reducing the shorthand requirement of 15 credit hours to 12 credit hours and requiring a hands-on word processing course.

Of the advisory committee members, two-thirds have employed departmental cooperative education students or program graduates.

6. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

The program quality is excellent and will continue to be strengthened with the implementation of letters of recognition and certificates in programs where they do not currently exist. These increased options will provide a step-by-step progression toward an associate degree.

Program graduates are in great demand. In fact, the college has many more requests from the business community and government agencies with job opportunities for associate in arts degree graduates than there are graduates to fill the vacancies. Many of the students enroll in office technology courses with the objective of developing marketable clerical/secretarial skills. They successfully complete selected skill-building courses and then leave to become employed. Other already employed students enroll in selected skill-building courses with the goal of job advancement. Students in these two groups do not feel the need for a completed AA degree or certificate. The college believes it is serving the needs and desires of degree and certificate seekers, job-entry individuals, and career advancers with up-to-date curricula, state-of-the-art equipment and labs, and quality instruction.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Prince George's Community College

PROGRAM TITLE: Data Processing

PROGRAM HEGIS NUMBER: 5101-01 LEVEL OF AWARD: Certificate/AA

1. What steps are being taken to attract and retain qualified full-time faculty for this program?

   During the Summer of 1985, one faculty member retired from the full-time data processing faculty. This position will be filled by someone with microcomputer competence and expertise to add strength to the teaching capabilities of the college in this developing area. With the beginning of a new Microcomputer certificate option in Fall 1985 and plans for expanding this into an AA degree offering by the Fall of 1986, the need for faculty to meet this new extension of the current Data Processing curricula is being addressed.

2. What success has the college had in keeping up with the high equipment costs associated with this program? Describe the nature and scope of recent equipment acquisitions?

   Mainframe computer costs are shared by both administrative and academic users. During the 1985 fiscal year, the college arranged to purchase a more powerful model of the mainframe computer to obviate leasing costs, thereby realizing financial savings for the institution. Both academic and administrative mainframe computing capabilities have been increased.

   To enable the college to provide microcomputer training at the current level of microcomputer technology, 35 microcomputers were purchased during the Summer of 1985 which will support the microcomputer curricula as well as provide additional microcomputer support for existing courses and planned computer literacy instruction for all students.

3. What trends in the rapidly changing data processing field do you see as most critical to the future direction of this program? How is the college responding to these trends?

   Without question, the increased use of microcomputers in the workplace for both data processing professionals and all employees is not just a trend, but a fact. As mentioned in response to question 2, the college added modern microcomputer facilities during the Summer of 1985. It is expected that this equipment will support growth in the credit and noncredit offerings of the college.

A second trend, at least in the Washington metropolitan area, and one which the college continues to address, is upgrading of job-entry educational requirements. The college continues to respond, also, to the development of strong transfer programs with area institutions.

4. What factors account for the declining enrollment in this program?

Factors affecting enrollment in Data Processing curricula include a State and nationwide trend in the computer area. Specifically, media reporting and interpretations of the job market for computer-trained students were in many cases unrealistic.

This "over-selling" of employment opportunities caused an immediate increase in Data Processing enrollments at the college in 1983-84. Enrollment has now settled back to a more reasonable level consistent with job opportunities in the Washington metropolitan area.

While the college has been providing microcomputer training for quite a few years, only recent developments in the area of software application packages have made the college's former microcomputer facilities totally accessible for a broader range of hands-on education and training. The college expects that the recent purchase of microcomputers and peripheral equipment will have a favorable effect on enrollments.

5. At what level does the college expect the enrollment to stabilize?

Much of this depends upon success with newly developing curricula and the employment demands of the service area. As mentioned above, a strong program in microcomputer-related training should stabilize enrollments within the next two years.

6. If you were asked to give one piece of advice to your community college colleagues throughout the State on data processing AA and certificate programs, what would that advice be?

Develop strong transfer agreements to assist students in achieving the four-year degree that has become a common requirement for entry level programming positions. Also, develop up-to-date microcomputer training to satisfy both degree and non-degree needs for this area of rapid growth and change.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The college should review the recommendations made in the statewide evaluation of data processing programs and implement those recommendations it deems appropriate for its program.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Prince George's Community College

PROGRAM TITLE: Radiologic Technology

PROGRAM HEGIS NUMBER: 5207-01 LEVEL OF AWARD: AA

1. What major recommendations were made in the recent reaccreditation visit by the Committee on Allied Health Education and Accreditation (CAHEA)? How is the college responding to these recommendations?

   The CAHEA report was forwarded to the SBCC. Their recommendations include the following:

   a. Complete development and implementation of competency-based clinical courses.

   b. Update and expand library holdings.

   c. Lack of policies relating to reporting illness, communicable disease, pregnancy, and incidents.

   Actions taken within the program include the following:

   a. The development of four additional competency-based clinical courses has been completed. These courses include:

      - XRY 153. Clinical Radiography
      - XRY 160. Radiographic Techniques I
      - XRY 251. Radiographic Techniques III
      - XRY 253. Clinical Radiology

   b. A divisional procedure for deleting library holdings of five years or older was developed, approved, and implemented. New texts, both general and reference, have been ordered.

   c. Policies regarding illnesses, communicable diseases, pregnancy, incidents, and other relevant topics have been compiled into a divisional Manual of Health Requirements. A copy of the manual has been forwarded to the SBCC.

2. What factors account for the declining enrollment in this program?

Several factors which contribute to the decline in enrollment have been identified. These include:

a. Greater career options outside of the health area, e.g., computer field.

b. Publicity on over-supply of health personnel-massive reductions in force at Prince George's General Hospital and Medical Center.

c. Fear of radiation, nuclear.

d. Persons operating radiographic equipment do not have to be licensed, thus many operators are trained on the job; there is no incentive to obtain education.

e. High school enrollment is down.

3. At what level does the college expect the enrollment to stabilize?

Enrollment is expected to stabilize at 20-25 students each year.

4. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

a. The advisory committee meets a minimum of twice each year. Other meetings are held as needed.

b. The advisory committee has made the following suggestions:

- develop a noncredit ultrasound program;
- incorporate a pediatrics component of study;
- establish contacts with job-retraining programs.

c. Of the twenty members on the advisory committee, all but four represent employers of Prince George's graduates. Faculty are in constant contact with physicians, graduates, and employers for input regarding progress of graduates, curriculum, continuing education needs, among others.

5. What factors account for a discipline cost per credit hour that is much higher than the average discipline cost per credit hour at the college?

Several factors have been identified which contribute to a higher discipline cost per credit hour when compared with the average discipline cost per credit hour. These include:

a. Low enrollment.

b. Low faculty-student ratios in the clinical area because of accreditation essentials and nature of setting.

c. High cost of energized equipment and expendable supplies for laboratory usage.

Note: The Radiologic Technology program cost at Prince George's Community College is consistent with other institutions in Maryland.

6. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

The quality of the program is excellent. The recent Spring 1985 reaccreditation survey with its minimal recommendations reflects this judgment. Program graduates are in high demand. In fact, the college has many more requests from health care agencies with job opportunities for graduates than the college has graduates to fill the vacancies.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Wor-Wic Tech Community College

PROGRAM TITLE: General Studies Transfer

PROGRAM HEGIS NUMBER: 4950-01 LEVEL OF AWARD: AA

1. What factors account for the low number of awards in this program?

A number of factors account for the low number of awards in this program. First, the enrollment is relatively low compared to technical programs. Second, students enter this program for a variety of reasons, many of which are not degree related. Some students wish to polish their general communication skills or to expand their knowledge of human behavior, history, philosophy, or literature but have no desire to matriculate. Others test themselves for their ability to handle college material by taking a few General Studies courses before transferring to a vocational major. Many take a few courses before transferring to local baccalaureate colleges--Salisbury State College and the University of Maryland Eastern Shore. These students choose Wor-Wic Tech for a starting point because it is nearly half the cost of other local institutions, the classes are smaller and scheduled at times convenient for working people, and recent high school graduates with low SAT scores may enter Salisbury State if they can transfer 12 successful hours of college credit. These transfer students, by the way, rarely take more than the 12 hours because of the fairly rigid transfer requirements at Salisbury State College.

According to college survey evaluations, the program satisfies its constituents; they receive what they come for. Many would like a more transferable program and indicate they would take more courses at Wor-Wic Tech if they could be assured the courses would directly transfer. For instance, historically Wor-Wic Tech's ENG 151, Fundamentals of English II, has focused on strategies of writing and on documentation and proof of an assumption. Because it has not included literature, it has not transferred as a standard second semester college English course at Salisbury State College. This issue is being addressed and will be discussed later in this report.

2. What does the college consider to be a minimum number of awards for a successful program?

Because of the variety of reasons why students enter the program, it seems spurious to tie the success of the program with the number of awards given. Students do not usually enter General Studies to get a degree or a job; graduating with an AA is significant to only a few. However, the college would like to offer a more articulated program to enable students to enter at or near the junior level of a four-year institution.

3. Using entrant follow-up or admissions data, describe the goals of students who enroll in the program.

A survey was sent to a random sample of 101 out of the 202 people who have enrolled in the General Studies program since 1982; 25 responded. The results are:

Educational Goals

	n	%
Courses only	3	12
Degree	7	28
Unknown/blank	2	8
Enough courses for direct transfer to baccalaureate program	13	52
Total	25	100

Personal Goals (some checked several)

	n	%
Exploration of new career field	10	40
Immediate job entry	0	0
Transfer	13	52
Update skills for current job	3	12
Personal interest	5	20
Other/unknown/blank	0	0
Total	31	124

Source: Survey, Fall 1985, of entrants since 1982.

4. The number of respondents to the follow-up surveys is inadequate to draw a conclusion about the program. Submit additional information for at least fifteen students from surveys of entrants and/or graduates. The surveys can be done by mail or telephone. Present the results in a table comparable to the PDM student follow-up display; salary data are not required.

The results of a survey of sixteen individuals, five graduates and eleven entrants no longer attending Wor-Wic Tech, are as follows:

	n	%
Number of respondents	16	
Full-time job	10	63
Part-time job	3	19
Transferred, not employed	2	12
Not employed, not transferred	1	6
Transferred regardless of employment	7	44
Achieved personal goal	15	94
Satisfied with instruction	16	100

5. General Studies is the only transfer program available at Wor-Wic Tech. Describe the commitment of the college to this program within the context of what it means to be a comprehensive community college and, more specifically, as it relates to goal 4 in the 1984-85 college catalog, ". . . To provide programs in the arts and sciences for students who want to continue their formal education by transferring to a four-year college or university . . .".

   Until recently, General Studies was less a program and more a department to house the college's general, support courses. While it still serves both purposes, there has been more support in the last year to move the program into a more viable position. As a new institution, Wor-Wic Tech was hesitant to focus attention on anything but its original goal of providing local people for local jobs. A transfer program, though mandated by the State, was not the primary thrust of the college. As the college has grown and has established its place in the region, it can now more strongly serve those students who need a community college as a starting point rather than as an end in itself.

6. This program was identified for a qualitative evaluation several years ago. What actions were carried out by the college in response to that evaluation, and what was their effect on the program?

   Since the last evaluation, the college used an NEH grant to generate generic skills needed by all Wor-Wic Tech graduates. The faculty attempted to integrate these skills into not only the General Studies program but also into vocational courses, strengthening the entire curriculum. Also, until last year the program had only two full-time faculty members, one with department head duties. In January 1985, a new full-time English position was filled, and in August 1986 a full-time social science position is projected. Decreasing the full- to part-time ratio will enhance the quality of instruction. Finally, last year articulation with neighboring baccalaureate schools was initiated by Wor-Wic Tech. These discussions are leading to stronger transfer capability for students.

7. Make a value judgment about the quality of the program. Is program quality low? Satisfactory? Excellent?

   The quality of the program is good. The full- and part-time faculty credentials and student evaluations are among the highest in the college. Individual courses are carefully planned according to student need and current research in the respective disciplines. In the Fall 1985 survey of General Studies entrants since 1982, 75 percent of the 25 responding students rated the quality of the average General Studies course as "excellent" or "very good;" 25 percent rated it as "good;" no student responded "not very good" or "poor." The program as a whole, however, is weaker than its individual courses. Because it has not traditionally offered a variety of general courses and because the general courses have been geared toward the terminal AA degree vocational programs, General Studies has not offered a strong, transfer package. Nevertheless, 63 percent of the students surveyed rated the overall program as "excellent" or "very good" and 38 percent rated it as "good;" again, none rated it as "not very good" or "poor." The most common suggestion was to "add more courses," with a second semester of history being the most typical.

8. What action(s) does the college plan to take to address the above issues?

As mentioned earlier, the college is focusing more attention on General Studies. More faculty are being hired, articulation is ongoing, and recruitment is now extended to include the program. Further, the department has proposed course offerings that will more closely align itself with local baccalaureate requirements. Finally, an advisory committee of graduates, employees, and employers has begun work on identifying general and specific needs of all graduates in the 1980s. These actions will enable Wor-Wic Tech to meet the needs of a growing number of students who wish to begin a baccalaureate path at a community college, who would indeed not attend college at all without the advantages that a community college can offer.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Wor-Wic Tech Community College

PROGRAM TITLE: Computer Programming

PROGRAM HEGIS NUMBER: 5103-01 LEVEL OF AWARD: Certificate/AA

The Computer Programming program became operational during the Fall 1983 semester with an enrollment of 120 students and a staff of one full-time faculty member and several part-time instructors.

The initial focus of the program was an attempt to help students develop skills in the operation and programming of microcomputer systems. At Wor-Wic Tech Community College, the "non-campus" concept of facilities development dictated that the computer program operate at a leased facility within the Salisbury area. Such a facility was planned for and developed during the Fall 1982 semester and became operational in 1983 with two lecture/laboratory classrooms containing twenty independent microcomputer systems.

In July 1984, the program moved to a more comprehensive Computer Instructional Center which contained two computer laboratories, one lecture room with an instructional computer system, faculty offices, and a limited amount of program administrative space. Over the period September 1983 to present, the program has successfully developed and has met the primary institutional mission: "to train local people for local jobs."

The first graduating class of seven AA degree students in August 1985 successfully joined the Worcester/Wicomico Counties job force. As of September 1985, all but one of the graduates was employed in the computer field. Two of the graduates were employed in small businesses in which they were responsible for the management of the computer system.

Throughout the two and one-half years that Computer Programming has been offered at Wor-Wic Tech, there has been an effort to monitor and evaluate the quality of instruction and service. The following projects successfully contributed to the ongoing evaluation of the program:

a. The development of a long-range plan for the program.

b. A curriculum development study which focused on job-task analysis.

c. An evaluation of the program for the Middle States Association reaccreditation study.

d. The development of a program advisory committee.

This report will focus on the evaluation efforts of the Computer Programming and Microcomputer Operations curricula in the context of the evaluation criteria developed by the State Board for Community Colleges.

1. What steps are being taken to attract and retain qualified full-time faculty for this program?

The program is fortunate to have successfully recruited three full-time faculty for the program. The backgrounds of these faculty represent a mix of extensive field experience and formal training in computer science. The faculty have been given freedom to creatively develop programs of learning for the students. To support their work, the college has more than adequately planned for financial support for the program. The college has maintained a policy of providing positive work conditions for the faculty. For example, the following projects have been actively pursued by faculty since 1982:

a. Development of an instructional data base management system for the computer laboratories.

b. A curriculum development project in conjunction with Dundalk Community College (DACUM--Developing A Curriculum).

c. Continued development of hardware and software.

d. Involvement in community computer literacy projects.

All of these projects have been adequately funded and supported by the college's administration.

The long-range plan for the program emphasizes the development of the faculty. As of September 1985, the program employed three full-time faculty members and an average of three part-time faculty members per semester. One full-time faculty member serves as department head for computer programming and mathematics while another full-time faculty member is responsible for assisting with the development of the Mathematics program at the college. Although this staffing pattern appears to be adequate as of the Fall 1985 semester, the ongoing monitoring of laboratory experience by the faculty suggests that additional professional staffing is required in the computer laboratories. Since 1983, the program has relied heavily on the use of student aides to staff the laboratories.

In order to provide the students with additional instructional support, the long-range plan suggests that a full-time professional staff member be hired by 1990 to coordinate the activities in the computer laboratories. It is also suggested that such a person be active in developing computer literacy programs collegewide.

Also included in the 1987 fiscal year budget is a request for funds to provide an extensive faculty development effort during the 1986-87 academic year.

2. What success has the college had in keeping up with the high equipment costs associated with this program? Describe the nature and scope of recent equipment acquisitions?

The program has been able to maintain reasonable equipment costs through the development of a networked microcomputer system. The key, however, to successful fiscal management of hardware and software has been planning.

A common computer system which appears to be increasingly in use in the Salisbury area is the multi-user system, a microcomputer which serves as host computer to several smaller microcomputers. Such a system supports accounting, word processing, data base, and in some cases CAD/CAM packages. Wor-Wic Tech has responded to this projection by developing plans to upgrade its current computer equipment to include two multi-user systems by 1990. The plan calls for emphasis of systems which are compatible with the computer technology used locally. It is projected that the cost of such computers will continue to decrease.

Since the beginning of the program in 1983, Wor-Wic Tech has kept costs down by using economical, networked microcomputers. The Computer Instructional Center now operates the program by maintaining two laboratories with a total of 30 systems. Fifteen systems are networked to a 20,000 character storage drive. Economical dot-matrix printers have been used to keep printing costs down. However, during 1985 a better quality IBM printer was purchased. Although this economical approach has served the college well since 1983, the plans to expand to the use of multi-user systems should greatly improve the instructional technology without significant increases in equipment costs.

3. What trends in the rapidly changing data processing field do you see as most critical to the future direction of this program? How is the college responding to these trends?

A long-range program plan was developed during the Spring of 1985 by the computer faculty. The plan was reviewed by selected students, the program advisory committee, the dean of instruction, and the general faculty involved in computer instruction. This plan, which will be annually updated, will serve to direct operations and development of the program. The significant aspects of the plan are hardware development, software development, staffing requirements, instructional philosophy, and resource requirements.

The hardware/software development plan addresses several of the projected trends in the Worcester/Wicomico area. The DACUM project revealed that the revolutionary increase in the use of microcomputers by small businesses in the local area will continue to increase. There appears to be movement, in general, from the use of large systems to the use of smaller computer systems which rely on the use of vendor-developed software rather than the in-house application of high-level programming languages, such as Cobol.

A related development is that there is evidence that the need for programmers will decrease while the need for personnel who can select, implement, and modify software packages will increase. Hence, there appears to be the likelihood that more smaller systems will be developed under the control of people in non-computer fields, such as accounting, supervision, and office management. In general, more people will be using smaller systems which rely on software which is developed by the manufacturers of the systems and software houses.

4. Describe contacts that you have had with employers about the curriculum and the need for the program. How often has the Program Advisory Committee met during the past year, and what changes or revisions were suggested by the committee? How many members of the Program Advisory Committee are from organizations that employ graduates of the program?

As a result of the DACUM project and work with the Program Advisory Committee, a business and industry network has been established for the program. The advisory committee meets each semester and serves as the focal point for program development. The committee has been active in planning, recruiting students, and developing employment. Beyond the committee, the faculty has actively worked with employers to maintain a job pool for students. The continued development of the business and industry network is a primary goal of the program.

The primary program evaluation effort was the DACUM project which focused on completing a job-task analysis of projected positions in the data processing field in Wicomico and Worcester Counties. An assumption of the study was that if the job tasks for students are known, then the curriculum can be meaningfully developed. The project solicited the help of local business and industry and, as a result, initiated the development of a local employer network for the program to supplement the efforts of faculty, administrators, and the Program Advisory Committee. The outcomes of this project were as follows:

a. The curriculum was verified to be current with the training needed in the field.

b. Curriculum changes to improve the delivery of instruction were recommended.

c. A plan for hardware/software development evolved.

d. Additional information was obtained to support development of the departmental plan.

e. Working relationships between the college and local business and industry were further developed and improved.

By focusing on the improvement of the curriculum, the DACUM study provided a collegewide model to evaluate the quality of instruction, planning, and career development for students. More importantly, it provided a basis from which the advisory committee and employers can support and participate in the program.

5. If you were asked to give one piece of advice to your community college colleagues throughout the State on data processing AA and certificate programs, what would that advice be?

The strength of the program has been an effort by faculty to develop a meaningful curriculum for students and to provide easily accessible facilities. The focus of this effort has been the faculty and student's involvement with local business and industry. The continued development of such business and educational relationships is perhaps the most important aspect of community college management as we approach the 21st century.

SBCC STAFF RECOMMENDATIONS/COMMENTS

The college should review the recommendations made in the statewide evaluation of data processing programs and implement those recommendations it deems appropriate for its program.

Maryland State Board for Community Colleges

PROGRAM EVALUATION REPORT
1985

COLLEGE: Wor-Wic Tech Community College

PROGRAM TITLE: Automotive Technology

PROGRAM HEGIS NUMBER: 5306-01 LEVEL OF AWARD: Certificate/AA

The Automotive Technology associate in arts program was placed on inactive status in the Fall of 1983. The conditions that existed in the local automotive industry in 1983 have not changed considerably.

Therefore, the college requests that the certificate program also be placed on inactive status as of the Fall semester 1986. If cooperative efforts with the United States Department of Labor, Bureau of Aprenticeship and Training, indicate a credit program at Wor-Wic Tech Community College is desired by the employers and potential students in the area, the college will petition for a return to active status.

SBCC STAFF RECOMMENDATIONS/COMMENTS

State Board for Community Colleges policies state that a program may remain inactive no longer than two academic years. Given that the Automotive Technology AA curriculum has been inactive since Fall 1983, the college is encouraged to take definitive action on the program as soon as possible, but no later than Fall 1988.

ERIC Clearinghouse for
Junior Colleges
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